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ILLUSTRATED.

By W. SWAYSLAND.

With COLOURED PLATES.

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FAMILIAR WILD BIRDS.

FAMILIAR WILD BIRDS.

BY

W. SWAYSLAND.

First Series.

WITH COLOURED PLATES.

CASSELL & COMPANY, LIMITED:

LONDON, PARIS & NEW YORK.

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1883.

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PREFACE.

How much the charm of country life is due to the song of the birds it is very difficult to realise. And still less generally known is the wonderful variety of bird life in even hyper-civilised England. By many a country lad every note heard and every bird seen is alike known and recognised; but to many of those whose daily walks are limited to the stone pavements of our large cities, save that they probably know a robin and a sparrow when they see either, a bird is simply "a bird" and no more. To pourtray the many varieties of birds which yet visit, breed in, or live in England; to describe their haunts, habits, eggs, and appearance; is, therefore, a pleasant task, which may perchance add, for many, a fresh charm to their brief experiences of country life.

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GOLDFINCH

(2/3 NATURAL SIZE)

FAMILIAR WILD BIRDS.

THE GOLDFINCH.

Fringilla Carduelis—Linnæus. *Carduelis elegans*—Millicentrum.

MANY are the birds deserving the attention of ornithologists; but few more so than the [illegible] Goldfinch. Unfortunately, of late years our little friends have greatly decreased in [illegible], and so much has [illegible] deplored, that, as a [illegible] even the aid of [illegible] has been invoked [illegible] this and other [illegible] from extirpation.

The [illegible] artist's brush [illegible] superfluous, [illegible] draw the [illegible] to sell [illegible] that [illegible] one of the [illegible] tiful of [illegible] about [illegible] has [illegible] the [illegible]

GOLDFINCH

FAMILIAR WILD BIRDS.

THE GOLDFINCH.

Fringilla Carduelis—LINNÆUS. *Carduelis elegans*—M'GILLIVRAY.

MANY are the birds deserving the attention of ornithologists; but few more so than the sprightly Goldfinch. Unfortunately, of late years our little friends have greatly decreased in numbers; and so much has this been deplored, that, as a last resort, even the aid of Parliament has been invoked to help preserve this and other sweet little birds from extirpation.

The truthful accuracy of the artist's brush renders description superfluous; we need merely draw the reader's attention to it to call forth the acknowledgment that the Goldfinch is undoubtedly one of the most strikingly beautiful of British birds. It is about five inches in length, the hen being a trifle smaller; but the difference between the sexes

is so minute, that few, except naturalists, can distinguish it. In the hen (although they frequently differ) it will be generally found that the feathers immediately over the beak are light brown instead of black; the crimson "blaze" does not extend past the eye; and the black feathers upon the crown of the head are edged with brown, as also are the small feathers at the shoulder of the wing.

Being generally distributed throughout England, in the spring-time this interesting pair of birds are to be found busily "prospecting" their neighbourhood in search of a nesting-place. Although a preference is shown for the forked branches of an apple or pear tree in an orchard, yet they sometimes choose an oak, elm, or other tree, and upon the lichen-covered branches they industriously commence building their nest. This structure is a masterpiece of bird architecture, composed of moss, wool, and other materials, with a lining of horse-hair, and an inner and softer lining of the down procured by the birds from the ripe seeds of the dandelion and groundsel; the exterior being embellished in so lavish a manner with lichen, that it is scarcely distinguishable from the tree in which it is built.

The eggs are about five in number, of a pale greenish-blue, spotted and streaked with purple and brown at the larger end. After fourteen days the young are hatched, and are fed from the crop by both parents until able to leave the nest, when the birds escort their little family to some convenient spot where food is plentiful, and there continue feeding them for a few days with most assiduous attention.

The parent birds are at this time feeding principally upon the seeds of the dandelion and groundsel, often visiting the sides of the country roads for the former,

whilst a neglected garden will offer a choice selection of the latter.

Meanwhile the hen has not been idle, but has selected a site for a new nest, and the male bird rejoining her, they go through their domestic programme anew. Goldfinches have often as many as four nests in the year, so that their powers of propagation are very great.

Although building so elaborate a nest, some Goldfinches, from choosing slender branches that sway with the wind, often find the contents of their nests are consequently blown away by severe gales. The use of horse-hair is sometimes disastrous, as in one case we remember finding the hen dead, hanging by a noose of hair from her own nest.

The young birds, called until their first moult "grey pates," from having mottled grey heads, backs, and breasts, instead of the adult red, black, white, and brown, have otherwise the appearance of the mature birds, inasmuch as the flight and tail feathers are retained until the second moult. In the months of August and September and beginning of October, the different broods having for a long time congregated in such places as afford the most abundant supply of button-weed, thistles, &c., used in the latter month sometimes to number as many as two hundred birds, though those proportions are seldom attained now. By that time almost all the young birds have attained the adult plumage, and commence their migration, proceeding in small flocks towards the south coast, passing Brighton, and from Beachy Head and adjacent parts of the coast start upon their journey across the English Channel. But the Goldfinch is only partially migratory, and whilst so many proceed upon their perilous journey in search of warmer climes, a great many stay

behind and brave the rigours of our climate. In a severe winter (such as that of 1880–1881) many birds perish, and amongst them the Goldfinch suffers severely, numbers having been picked up dead from the effects of cold and hunger. Through the winter those remaining are found in various localities feeding upon the seeds of the thistle, button-weed, teazle, and even hanging upon the alder-trees searching for the seeds. These form their staple food, but the appetite of the Goldfinch requires change, and many another seed serves to support its existence through the winter.

Those birds remaining in this country through the winter are known by the name of "harbour birds," whilst those arriving in spring-time from abroad are known as "flight birds." The latter are far the handsomer, a foreign and warmer climate having intensified the brilliancy of their plumage, and are easily distinguishable from the less forward "harbour birds." The "flight birds" arrive in this country about the beginning of April, and, after mating, commence their arrangements for nesting as described.

MAGPIE

(½ NATURAL SIZE)

THE MAGPIE

[illegible]

[illegible] one familiar with [illegible] perhaps, some [illegible] [illegible] familiar than the Magpie; [illegible] it falls to the [illegible] of [illegible] of those with which it is a household [illegible] it wild. In fact, it is [illegible] a household pet that [illegible] know the Magpie, and [illegible] who are only [illegible] the clipped or caged [illegible] has probably been [illegible] [illegible] from the [illegible] but a faint idea [illegible] handsome appearance [illegible] idea of the ambulance [illegible] (not to use a [illegible] this restless but [illegible] when wild. [illegible] Magpie in a [illegible] main, however [illegible] ment. It [illegible] of the [illegible] [illegible] of us remember [illegible] [illegible] " and the " [illegible]

MAGPIE

THE MAGPIE.

Corvus Pica—LINNÆUS, PENNANT, BEWICK.

WE find among our familiar wild birds, perhaps, none more thoroughly familiar than the Magpie; yet it falls to the lot of few of those with whom it is a household name to see it wild. In fact, it is more as a household pet that people know the Magpie, and those who are only acquainted with the clipped or caged bird, that has probably been reared by hand from the nest, can have but a faint idea of his very handsome appearance, and little idea of the audacious pilferings (not to use a harder phrase) of this restless but interesting bird when wild. The habits of the Magpie in a natural state remain, however, even in confinement. It seems to be a part of the bird's existence to steal and hide. Most of us remember the nursery-tales of the "Basket of Eggs" and the "Maid and the Magpie,"

different to the smart, active, and inquisitive bird it appears when in confinement.

The female Magpie, as is the case with most of the Corvidæ family, is generally a trifle larger than the male, though possibly this rule is subject to variation; its plumage is not so brilliant, though the difference between the sexes is difficult for amateurs to determine.

Having, in common with the Raven and others of this family, a broad tongue, the Magpie will learn to imitate the human voice, and is consequently often reared from the nest and made a household pet; but if secured within a cage its restlessness invariably occasions a broken tail, whilst the partial freedom of a clipped wing is a source of insecurity to all. Anything glittering is an especial trophy to a Magpie's eye, and is forthwith taken away and hidden, whilst the dog in the kennel has to keep as sharp a look-out upon his dish of bones as the cook in the kitchen upon her more sumptuous dainties.

THE BULLFINCH.

Loxia Pyrrhula—PENNANT; BEWICK.
Pyrrhula vulgaris—FLEMING; SELBY.

FROM the extreme richness of colour displayed throughout its plumage, this handsome bird has long possessed a prominent position as a cage-bird; and this not alone because of its rich red breast, delicately-shaded grey back, and deep purple-black head, tail, and wings (the latter crossed in a beautiful manner with white), which are known to almost all bird-lovers; but more particularly because the Bullfinch possesses the power of imitation in a very high degree, and if taken from the nest and reared by hand, may be taught to pipe a tune more readily than any other bird. Many persons, however, having obtained possession of a Bullfinch, have been somewhat mortified to find that its natural song is but a plaintive little phrase often repeated in a monotonous manner, and its "call"

peculiarly melancholy! The Bullfinch, however, becomes particularly tame.

Though possessing such handsome plumage, the Bullfinch is somewhat heavily built, the shape of the head and thickness of the throat having undoubtedly earned its name.

In general arrangement of plumage, the hen is somewhat similar to the male, except that the splendid red of the breast and grey of the back is supplied by a dull brown.

An inhabitant of the whole of England, Scotland, and Ireland, it is also well known upon the continent, the Russian Bullfinches being renowned for their exceptionally large size, whilst Germany is the head-quarters of the "piping schools." The Bullfinches of Sussex, too, are notable, most of the prize birds at the Crystal Palace and other shows of late years having emanated from that neighbourhood.

The Bullfinch is extremely fond of trees and hedgerows, sheltered woods and thickets, but in early spring will quit those haunts for gardens and orchards, in its search for food; and it is at this time that it is often found picking the buds of the fruit-trees. Many a controversy has been the consequence, and ingenious apologists have suggested that "Bully" is only picking out the insect-eaten buds; but we fear that in few cases would he choose a damaged one for the sake of the insect if a rich fruit-blossom bud were near. In autumn the ripe blackberries that abound in woods and thickets are a favourite food. Later, in winter, privet berries and dockseeds are its staple; and the Bullfinch may be seen in country roads making a meal upon the docks and plantains that grow by the

wayside. At other times its food consists of the seeds and leaves of the groundsel and sow-thistle, and the remaining hips and haws that have escaped the winter, or any other seeds it may find in its foraging expeditions.

The Bullfinch commences preparations for breeding in the beginning of April. It builds a somewhat loose nest compared with some birds of this class, the structure being composed mostly of twigs and fine roots, with an inner lining of horsehair. This is placed securely in the lower branches of a tree, or the top of a high bush. A very favourite haunt of the Bullfinch is in the quickset hedge which is planted alongside many of our railways, this being generally secluded, and so permitting the birds to live and breed in comparative security. In common with most small birds, Bullfinches have many enemies; and, as if in fear, they wait until the foliage is well spread over the branches before building their nest; but even this precaution is often of no avail, for the clipping of the hedge will often expose the nest. Yet man is certainly not the Bullfinch's worst enemy, for not only jays, but stoats and weasels, are on the watch to destroy them. Unfortunately for the Bullfinch (with other victims), these marauders are far more successful than would be imagined, as a great many nests in a district are rifled of their contents by them in a very short time. However, after the first outburst of sorrow at their loss, the birds almost directly recommence their labours, and in a short time another nest is built, and duly furnished with another set of eggs. They generally have as many as three nests in the year, and, if any of those nests are destroyed, will even exceed that number. There are generally five eggs, of a pale blue colour, speckled and

streaked with purple at the larger end, and they take about fifteen days in hatching, the hen sitting very closely, whilst the male pays her every attention. The young are fed from the crop by the parent birds until of sufficient age to shift for themselves, when the parents commence building afresh. At this time the plumage of the young is considerably different from the male parent bird; the breast being yellowish-brown, and the black upon the head and the grey upon the back greyish-brown, until the first moult. The sex is not distinguishable until moulting discloses red feathers upon the breast.

There having been several instances of this bird turning black: it has been said by most naturalists, from the Rev. Gilbert White, of Selborne, down to the present day, that this was the result of feeding upon hemp seed; but one in our possession, which was fed entirely upon canary seed, by successive moults turned completely black. Pied birds with beautiful pink breasts have several times been taken, and one was once caught that was almost entirely white, but it soon died.

STARLING

(½ NATURAL SIZE)

THE STARLING

Sturnus Vulgaris—Linnæus.

PERHAPS there is no bird that does so much real good to the husbandman as the Starling. To those who only know the bird from its having eaten, in company with its congeners, [illegible] of the [illegible] and [illegible], or [illegible] the [illegible] with the [illegible], this may appear [illegible] news; but true it [illegible] is, nevertheless. The Starling generally finds a home where meadow-land or turf exists, and its usefulness to the grazier is incalculable. Those who possess lawns, and can watch the bird from an advantageous window, with the aid of a pair of glasses (which every naturalist should possess), may perceive this bird industriously parting the grass in a most ingenious manner with its beak, whilst securing and feeding

STARLING

THE STARLING.

Sturnus Vulgaris—LINNÆUS.

PERHAPS there is no bird that does so much real good to the husbandman as the Starling. To those who only know the bird from its having eaten, in company with its congeners, almost all the cherries and elderberries, or stopped the water-spout with its nest, this may appear startling news; but true it certainly is, nevertheless. The Starling generally finds a home where meadow-land or turf exists, and its usefulness to the grazier is incalculable. Those who possess lawns, and can watch the bird from an advantageous window, with the aid of a pair of glasses (which every naturalist should possess), may perceive this bird industriously parting the grass in a most ingenious manner with its beak, whilst securing and feeding

upon the most destructive grubs and insects that exist. When the pair have four or five young ones with inordinate appetites to feed, the number of ground pests destroyed by them is enormous; indeed, it is not too much to say that a lawn will not thrive without the assistance of Starlings. Added to this, his extremely handsome appearance makes him quite an object of beauty whilst walking about upon the grass with the sun glinting upon his glossy and speckled feathers. On a fine morning in the beginning of May we watched a pair of Starlings busily engaged in ridding several garden-beds of the slugs that would otherwise have eaten off the tender young shoots.

The Starling is a well-known bird, as it makes itself as much at home in towns as in the country. Many may call to mind being awakened at an unwonted hour in the morning by the "song" of the Starling. This song is one of the most peculiar specimens of bird music, and doubts have arisen in many minds as to its deserving such a description. It is generally (in town) delivered from a chimney-pot, and he shrieks and chatters with such intense gusto that there is no doubt the bird himself enjoys it. This bird may be taught to talk.

The Starling is about 8½ inches in length, with a moderately long beak, but somewhat short tail. The difference between the sexes is difficult to determine, but it will be found that the breast-feathers of the male are longer and more pointed than in the female; and whilst his eye will be found dark hazel, that of the female has a light ring around the iris.

Though these islands are never entirely free from the Starling, those continuing here the winter are probably arrivals from Sweden and Norway, driven along by the

snow to more congenial feeding-grounds. As the spring advances, the beak, which is dark during winter, becomes bright yellow, the rich glossy sheen of the plumage intensifies, and by summer the bird becomes extremely handsome.

In choosing a nesting-place it is very erratic; sometimes the hole in a tree made by a Woodpecker will be chosen; at another a hole in the roof under the eaves of a house, the crevice of a cliff, or in a tower or old building, or any hole in a tree conveniently large. Within this hole, wherever it may be, the Starling constructs a loosely-built nest of straw, hay, roots, feathers, and any other convenient material, seldom neglecting to allow two or three straws to protrude from the hole.

The eggs are generally five in number, though sometimes six may be found, and in colour they surpass almost all others in delicacy of tint, being of a uniform pale greenish-blue, though specimens are often found much lighter. There is but one nest in the year, unless accident to the first may occasion a second brood. The young are fed with marvellous industry by the parent birds upon grubs, worms, insects, and their larvæ, visiting the meadows and running around the sheep and cattle, not disdaining to perch upon the sheeps' backs in order to extract the ticks from the wool.

The plumage of the young is exceedingly unpretending, being dull greyish-black, the wing and tail feathers being darker and the throat lighter. Cream-coloured specimens have been taken, as well as white, but after raising the hopes and expectations of their owners, at the first moult the former lose their distinguishing colour, and regain the normal plumage. Albino birds are not at all rare, one

having been lately in our possession that was extremely tame; there are often found amidst these erratic birds specimens of a pied colour.

Starlings are always more or less gregarious, and in October proceed upon their migration southwards. The flocks assembled are sometimes of prodigious numbers, and yet, as an old and well-known naturalist, Mr. G. Swaysland, says, "there isn't one too many considering the good they do." Their flight is particularly swift and straight, maintained at a considerable height, and they keep together with marvellous fidelity.

CHAFFINCHES
(½ NATURAL SIZE)

THE CHAFFINCH

Fringilla Cœlebs. [illegible]

THE Chaffinch has obtained the name of the "Bachelor Finch," on account of a singular habit, related by the Rev. Gilbert White in his "History of Selborne," [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] of England; [illegible] in [illegible], so that it would appear to be habitual amongst Chaffinches. The hens [illegible] the male birds a few days, leaving this country about October; some birds, however, principally males, remain with us throughout the winter; the others proceed upon their journey south, some affecting one [illegible]y, and others another, whilst the remnant ex[illegible] the banks of the Nile. Those remaining have

THE CHAFFINCH.

Fringilla Cœlebs. i.e., Finch—Bachelor.

THE Chaffinch has obtained its name of the "Bachelor Finch," on account of a singular habit, related by the Rev. Gilbert White in his "History of Selborne," and verified by many ornithologists, of the males separating from the females about the time of the autumn migration. Linnæus seems to have noticed the same circumstance in Norway, as also Mr. Selby, writing from the north of England; Morris also notices it in Worcestershire, so that it would appear to be habitual amongst Chaffinches. The hens precede the male birds a few days, leaving this country about October; some birds, however, principally males, remain with us throughout the winter; the others proceed upon their journey south, some affecting one country, and others another, whilst the remnant explore the banks of the Nile. Those remaining have

to endure all the hardships inherent to a northern winter, yet few birds seem to treat the severity of our climate with such cheerful gaiety as the trim-built Chaffinch. Always neat and clean, whenever an opening in the ice will allow of it with safety, this hardy bird may be seen taking his "matutinal tub." Thoroughly wet he will be before he has done floundering in his icy cold bath, when he betakes himself to some cosy sheltered spot to preen and dry himself. His bachelor existence, if hard, evidently has its pleasures, or he could never utter such a jovial, yet defiant note as that well-known "pink, pink," that every one must have heard who has lived near the merest shadow of a garden or square. No doubt his stock of seeds grow short in winter, yet whatever they be, he cares not so that they are good to eat; and where some birds would starve, a Chaffinch would look sleek. He feeds upon the fallen beechmast, which few other birds can eat, and altogether seems the reverse of most bachelors as regards economy.

Having lived through a hard winter, however, spring puts another complexion upon affairs; and becoming tired of his hermit life, he hails with delight the return of his congeners about the beginning of March. These "flight" birds may then be seen returning from their foreign winter quarters in one continual stream, possibly having picked up stragglers in their journey, until they arrive from across the Channel in flocks of from twenty to thirty birds, continually following each other at short intervals, and flying north-east generally.

After securing a mate, the markedly practical character of the Chaffinch is shown in the choice of a site for their nest. Although oftentimes showing a preference for apple trees, yet will they build in almost any tree, provided they

can obtain a suitable position. This *must* be one of exceptional security; sometimes a slight clump of branches, or a convenient fork, but oftener upon the top of a lichen-covered protuberance where a small bough offers a firm resting place. The nest is certainly wonderful in its structure, bound firmly round the limb of the tree, and formed of small roots and grasses and moss, lined in the most perfect manner with wool, horsehair, and feathers, and covered entirely without with the beautiful lichens to be found upon the neighbouring trees, so that as nearly as possible the nest may resemble in appearance the bark of the tree upon which it is built.

Within this sweet little nest the hen lays her four or five eggs, sitting upon them with exemplary patience and assiduity; sometimes she has allowed herself to be taken rather than desert her treasures. The male assists to the best of his ability, and when disturbed by any intruder, neither of the birds fly away far, but remain constantly within the close vicinity of the nest until the disturbance is past. In about fourteen days the young are hatched, and are fed by the parent birds, chiefly upon insects of various kinds (they themselves living all this time upon seeds and grains), until in about a fortnight these young birds will be able to leave the nest; then another nest is commenced, and the routine described above having been duly observed another quickly follows, as the Chaffinch invariably has three nests a year. Whilst engaged in housekeeping, the Chaffinch will seldom allow any other birds of his own species to live near him, being himself absolute king of the neighbourhood.

The Chaffinch, being long and shapely built, has a particularly graceful flight; and if disturbed whilst feeding upon the ground, rises with a sudden upward flight, and

perches upon the nearest tree to reconnoitre. When nidification sets in, the upper beak of the Chaffinch becomes a light leaden colour. He doesn't moult entirely in spring, but sheds the tips of the feathers and becomes the bright and pretty bird depicted in the plate. When alarmed, he has the power of elevating the feathers upon the crown of the head, and so forming a slight crest. The plumage of the hen is much more sombre, being deficient in the blue on the head and the rich colouring of the breast. The young are exact imitations of the hen until they moult in the autumn, and then the males obtain their brown breasts and bluish-brown heads.

The song of the Chaffinch has a charming air of rusticity in it, that seems to breathe of trees and flowering fields. It is uttered in a clear melodious tone, consisting of several phrases, forming a set song of considerable beauty. This song is repeated again and again like a merry old English catch.

Although white or pied birds have seldom been taken, yet specimens of a cinnamon colour have been frequently obtained. The Chaffinch is, as a rule, a wary bird, and is inclined to be wild and untameable when caged.

RAVEN
(1/4 NATURAL SIZE)

THE RAVEN.

Corvus Corax.

ALTHOUGH the name of the Raven is as familiar to the world as that of the Lark, there are few indeed who have seen one in a state of nature, and this for various reasons—notably because they are now particularly scarce, and again because they affect certain districts. Although there may be other localities equally well adapted to support them, nothing will induce them to forsake their old haunts. For instance, a pair of Ravens have built and bred in the chalk cliff of Beachy Head for many years, and the systematic taking of their young does not deter them from making fresh ventures on the same spot. Should either of a pair of Ravens be killed, another partner soon presents itself; and even if both

be destroyed, it has been noticed that another pair will invariably occupy the district; so that it is seldom a locality, once made the home of a pair of Ravens, will be destitute of their presence.

Although possessed of great power, and not altogether devoid of courage, they invariably give way at the approach of man, and though they will defend their nest most valiantly against the attacks of other birds or of animals, they offer not the slightest resistance to a man, or even boy. But if a weakly sheep be present in a flock, these birds will hover around the unfortunate animal, and even perch upon it, and peck out its eyes, or otherwise torture it until it dies.

The Raven is the largest of the Crow family, and is a bird of striking character. Its attributes are well known, for the pens of historians, poets, and novelists have all been brought to bear upon the Raven. Dickens has introduced the Raven with great success in "Barnaby Rudge," whilst Edgar Allan Poe delineates its weird power over superstitious imaginations. In many parts of this country, the flight of a Raven across one's path is enough to make the heart of the boldest rustic quake, whilst to hear its unspeakably horrid croak from the bough of an adjacent tree is held to be prognostic of the direst calamities. Indeed, no end could be made to the many local superstitions connected with the Raven.

The Raven is distributed over the whole of England, Wales and Scotland, and Europe generally. Its presence is easily detected, for its never-to-be-mistaken croak can be heard at a very great distance. They fly at a very great height, either singly or in pairs, but congregate in greater numbers whenever there is a prospect of carrion.

The food of the Raven baffles description. It indiscriminately eats everything that may come in its way. Carrion of all kinds, small animals, birds and their eggs or young, insects, and even reptiles, form the principal food, but corn and grain sometimes receive the attention of this omnivorous bird. Ravens living near the sea will diligently search the shores for any food, either fish or flesh, that may have been cast up by the waves and left upon the beach by the receding tide. They are tremendously voracious, and after having gorged themselves will retire to a place of safety to digest the food, and will then return again to their horrid feast.

The difference between the sexes is very difficult to determine, inasmuch as their plumage is of a uniform black, which, at certain seasons particularly, is tinted with a glossy shade of purple, that makes the jet-black plumage of this sable bird a household word. However, not alone the feathers of the Raven, but also the beak, mouth, tongue, legs, and feet also partake of the same black hue. The beak is curved towards the point, and over the base are a number of coarse bristles, inclining forwards. Ravens live to a great age, instances having been recorded of the attainment of half a century, and in confinement have been known to live for several decades.

Ravens generally build their nests in the crevices of a chalk or other cliff, or the highest forks of tall trees, or suchlike places of security. The structure is composed of twigs, wool, and horsehair, and the eggs are four or five in number, of a pale green-ground colour, spotted and speckled with a darker greenish-brown. The female sits for twenty days, the male feeding her the while, and sometimes relieving her in the duties of incubation.

When the young are hatched, the parent birds supply their wants with most persevering attention, but when old enough the parents drive them away, and they are forced to provide for themselves.

Ravens are partially migratory, the reason apparently being want of food, though possibly the cold may affect them, and induce them to seek warmer parts.

Many are the anecdotes that have been related of the Raven, most of them concerning those birds that have been kept in confinement; for under the latter circumstances, or with clipped wings, the Raven is a droll fellow, and is generally in conflict with the dog or cat, though they sometimes set up a great friendship. The bird is endowed with a passion for secretiveness quite as much as the Magpie, and what it cannot eat is invariably hidden. The principal reason, however, which has occasioned the Raven to be made a pet is its marvellous power of imitating the human voice, as also any other sound that may particularly strike its ear.

LINNETS
(2/3 NATURAL SIZE)

THE LINNET.

Fringilla Linota—LATHAM.
Linota Cannabina—LINNÆUS.

WHEREVER bad farming prevails, the Linnet will be found. "Clean" land has few charms for him, but where weeds grow apace is the Linnet's happy hunting-ground. No doubt toll is taken of the sown seed, but were he not to help keep the weeds under, many a good field of corn or root crops would be choked. When it is taken into consideration that a Linnet will eat several thousands of the seeds of weeds in a week, some idea may be formed of its power for good.

The plumage of the Linnet is subject to great variation. The young Linnet of the year has an unpretending plumage of greyish brown, each feather being tipped and edged with slightly darker brown; the primary wing-feathers are dark brown, partly edged with white, and the tail-feathers

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are also dark brown, edged with white; and until after the first moult this young bird is known as a grey Linnet. The plumage of the adult female is very similar. Although only partially migratory flocks of Linnets leave this country in October, those remaining the winter generally become gregarious, and may be found in large open fields feeding upon whatever seeds may be found. In the stubble fields they feed greatly upon the seeds of the wild mustard or charlock (*Sinapis arvensis, Linnæus*), known in Sussex as "kilk." When disturbed Linnets rise in a flock, and, unlike the rest of the Finch tribe, do not hasten to the nearest tree, but continue in the open, contenting themselves by alighting in another part of the field. The general food of the Linnet, however, consists of any seeds that may fall in its way; chickweed and dandelion being its staple diet through the spring, and in summer to these is added the seeds of rape, &c.

During the month of March, small flocks and even pairs of Linnets begin to arrive from "across the water;" the males with bright red breasts of different degrees of intensity, some much brighter than the one depicted in the plate, and varying down to lemon-colour. This is occasioned by their shedding the brown tips of their feathers, and not by a regular moult. The males remaining in this country are also changing their plumage, and from this marked difference originated the idea amongst amateurs that the Rose Linnets (as they are then called) were of a separate species to the grey Linnet. In autumn and winter, the male plumage is of a richer brown and the white on the wing extends to the quill, which is not so in the female, whilst her back becomes a duller brown; the breast feathers of the male Linnet are horizontally edged

with brown, but those of the female are marked perpendicularly. If the bird be caged after the second moult, the plumage of the breast becomes materially changed, as but little of the deep rosy red appears, the feathers becoming browner, and in the third moult there is but the faintest trace of its once distinguishing colour; and the general plumage having become deeper in character, the bird is then known by the name of the "Brown Linnet."

This bird also shows many eccentricities in the way of abnormal plumage. We have had several pied specimens in good song, and took one upon the Brighton Downs of an elegant cream-colour (this bird lived several years); another specimen came under our notice, which was white with a lovely pink breast; the colour upon the breast, however, faded in moulting, and the bird became white. A pair were taken in 1882 of a delicate cinnamon-colour.

The furze-clad sides of hills are the Linnet's favourite nesting-places, though where furze is not handy, a hedgerow or bushes and shrubs will often offer a home, and sometimes a pair will even come into a garden near a house to build their nest. This structure is composed primarily of small twigs and stalks of grass and moss, intermixed with wool and lined with wool, horsehair, and down. Four or five are the usual number of eggs, but even six have been found; they are very much like the Goldfinch's, being of a bluish-white colour, spotted especially at the larger end with purple and reddish-brown, but they vary in colour, and are sometimes found perfectly white: yet it is not to be presumed that white eggs would produce white birds. The eggs are about fourteen days hatching, and in another fourteen days the young leave the nest. Linnets have

generally three nests a year, and have been known to have as many as four, if any one of the previous nests was rifled or destroyed. Whilst the hen is engaged in the duties of incubation, the male invariably mounts guard upon the top of a neighbouring spray, and upon any intrusion being threatened, immediately sings to warn his mate of her danger; they then often fly together to some post of safety, and watch until the danger has passed.

The song of this bird is most deservedly held in high estimation, it being especially sweet and flute-like, whilst its phrases are very varied, and uttered in a clear but jerky style, unlike the song of most other birds. It is generally delivered whilst the bird is seated upon a branch or spray of a hedge or furze-bush, though it will even sing whilst on the wing when returning in the spring. Its call is at once a distinguishing mark, as there are few birds who use a language similar to the Linnet's jerky "chuck-a chuck-a." Linnets are easily reared from the nest, and though timid become very tame.

ROOK
(1/4 NATURAL SIZE)

THE ROOK.

Corvus frugilegus.—Linnæus.

THIS bird is one of the commonest of the Crow tribe; yet, like many another useful member of the bird world, the Rook has often been denounced as a depredator because it takes toll of the newly-sown seeds and grain; whereas, in fact, it is one of the farmers' best friends, and, but for its assistance, many a fair field of corn or roots would be completely destroyed by grubs, worms, and other destructive insects. Rooks have been noticed to visit fields or meadow-pastures, and pull up the roots in their endeavours to obtain the grub or other insect beneath. This was at first ignorantly cited as wanton destruction, but it was found, upon minute inspection, that almost all these plants had been attacked by some pest to

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vegetation, and that the bird's instinct taught it to distinguish between the sound plant and the insect-eaten ones.

The peculiar habits of Rooks have been the study of naturalists in all times, and very many interesting anecdotes have been related of them. Being more gregarious than any other of their tribe, and also being especially eccentric in their choice of nesting-places, they assemble together in large numbers in the trees selected by them; and this is termed a Rookery. The trees are generally tall, but little heed is given to their species. These Rookeries are to be found all over England, wooded districts, of course, being preferred; although many instances occur of these birds taking up their abode in towns—notably the Pavilion Grounds at Brighton—and in many trees in Oxford. Many may have noticed the nest of a pair of Rooks in the tree at the corner of Wood Street, Cheapside.

The nest is built of twigs in the topmost forks of the trees, and is a large loose structure. This nest is often pulled to pieces and rebuilt several times, until it meets with approval. Sometimes the whole of the Rooks will desert their Rookery, and take up another abode for the time, and just as suddenly (perhaps after the lapse of years) return; this, too, without any apparent reason.

Rooks commence building early in the spring, and by the lateness or more forward preparations for nesting have been held by many to prophesy an early or late summer. Particularly at this time, Rooks may be seen even in the fields feeding one another. This is evidently an attention of the male to the female, and is continued whilst the latter is sitting upon the nest. This circum-

stance has many times occasioned the idea that they were feeding very early young birds. The eggs are four or five in number, of a pale greenish ground, blotched with a darker greenish-brown. Except the nest should be destroyed—as may happen during high winds such as that upon the 29th April, 1882—Rooks have but one nest in the year.

The young are very noisy in welcoming the advent of the parent-birds with food, which is of a very mixed description, and embraces the destructive grub of the common cockchafer, the larvæ of many other insects, grubs, worms, wireworms, and slugs. It is now readily admitted that the little corn eaten in the early spring (despite the terror of the scarecrow) is more than counterbalanced by the multitude of destructive insects destroyed in the remaining months of the year.

The young squabs can generally fly by the end of May, and repair with their parents to the fields, where they are still fed by them until able to obtain their own food.

Young Rooks are of a uniform black plumage, which increases in brilliancy in the succeeding spring. If not previously lost, the feathers immediately round the base of the beak do not grow again after the second moult, leaving a white patch, as shown in the plate, which has earned for the bird the name of the "White-faced Crow." Both male and female are subject to this, and the sexes are difficult to distinguish.

At the approach of winter the birds leave their Rookeries, and then roost in the hazel bushes in woods, but in early spring return to their native Rookery. Although at its proper season Rook-shooting is systematically carried out, it does not deter the surviving

birds from returning to their well-beloved trees; neither do their numbers appear to decrease or increase. If not shot, and their numbers become excessive, they leave for a new colony.

Rooks are extremely wary, and when in the fields, invariably set one or two birds upon a tree or an eminence to act as sentinels; upon the approach of danger, a warning note is given, which is perfectly understood, and, if the danger increases, is followed by the flight of all. Many are the local traditions with regard to the peculiar habits of Rooks: when the flock scatters whilst flying high, it is deemed to be prognostic of rain.

As with most birds, erratic specimens have been taken of abnormal plumage. White Rooks have been frequently observed and taken, as also pied specimens; and, less frequently, cream-coloured birds have been noted amongst their sable companions.

The voice of the Rook consists of one note, which is a croak resembling the word "craaw," though sometimes when flying high in flocks this sound is repeated more softly and rapidly.

WREN
(⅚ NATURAL SIZE)

THE COMMON WREN.

IT was some time before naturalists could assign this popular favourite a proper position in ornithological classification, and the Wren was originally placed among the warblers; but for reasons (some few but) to be placed with the Creepers, in having more in common with that class than with the Warblers.

Equally with the Robin and Swallow, this bird has attracted an amount of popularity almost amounting to superstition, and it is not to be wondered at that a whole Bible bird, like the Wren, whose short-lived exploits of heroic and romantic character throughout the world, dwelling at will in every living, should hold a prominent position in the goodwill of all ranks. Some little fine bird, however, we are sorry to say the Wren in certain localities suffers considerably from the unpronounceable schoolboy. Notwithstanding

WREN
(Natural size)

THE COMMON WREN.

Sylvia Troglodytes—Pennant, Temminck.
Troglodytes Europæus—Selby, Gould.

IT was some time before naturalists could assign this popular favourite a proper position in ornithological classification, and the Wren was originally placed among the warblers; but for various reasons this bird is now placed with the Certhiadæ, as having more in common with that class than with the Sylvidæ.

Equally with the Robin and Swallow, this bird has enjoyed an amount of protection almost amounting to superstition, and it is not to be wondered at that a cheery little bird like the Wren, whose whole food consists of insects, and who stays with us throughout the winter, cheering us with its merry little song, should hold a prominent position in the goodwill of all men. Some little time back, however, we are sorry to say the Wren in certain localities suffered considerably from the irrepressible schoolboy. Noticing

that Wrens naturally kept to the shelter of the hedgerows, and seldom ventured upon any lengthened flight, these boys, armed with sticks and stones, would beat on either side of the hedge until poor Jenny was killed. We hope, however, this practice is defunct. It may have arisen from the old custom of "Hunting the Wren on Christmas Day," once general in many parts of Ireland and Wales, if not also of England, when one party would carry sticks to beat the bushes, and another stones to kill the poor birds as they emerged. The origin of this curious custom is lost in obscurity. It has been ascribed to the anger felt by the Catholic Irish at a Wren saving from surprise and massacre, by tapping on a drum, a small party of worn-out Protestants. But it is singular that this same legend in Southern Ireland occasioned a ceremony in which a Wren was carried about in honour, to the accompaniment of the following ditty :—

> The wren, the wren, the king of all birds,
> Was caught St. Stephen's day in the furze;
> Although he's little, his family's great,
> Then, pray, kind gentlefolks, give him a treat.

Jenny or Kitty Wren, as it is also called, is one of our smallest birds, and yet there is scarcely one better known. This may be on account of the nursery tale of the courtship and marriage of Cock Robin and Jenny Wren; and doubtless that same story may account for the idea which is still prevalent, that the Wren is the female of the Robin. In early spring attentive observers of Nature may see a pair of Wrens engaged most busily in the work of nest-building. This structure, which is dome-shaped, with an aperture at the side, is composed of most varied materials, principally twigs, roots, leaves, moss, and feathers, and is

placed in equally varied positions. We have found them against the trunk of a tree, under the thatch of a building, in the forks of a cabbage run to seed, and even overhanging the variable waters of a stream; another favourite position is the aperture occasioned by the loss of a brick from an arch under a country roadway, where the grass and weeds grow around, and partially conceal the position of the nest. The position and its surroundings greatly influence the materials of which the nest is composed, as the birds labour that it may as nearly as possible resemble the appearance of its site. The Wren, although such a small bird, builds her nest of heavy material, so that it is matter for surprise how she contrives to transfer it to its place. Notwithstanding, she is extremely capricious, and will often make two or three nests before one is settled to her satisfaction; when, however, this is consummated, from six to eight white eggs, speckled with a few red spots, and about the size of a bean or large cherry-stone, are laid in the feather-lined nest, and the hen sits upon them for about ten days, being partially fed by the male bird meanwhile. The young are fed by the parent birds upon insects, flies, larvæ, and small worms, until they leave the nest and become self-supporting. The parent birds then commence a new nest, producing two broods a year.

The Wren may be found all over England and in Scotland and Ireland, whilst, as one of its classified names denotes, it is also a general inhabitant of Europe. The plumage is composed of different shades of brown, barred with darker brown, and some naturalists aver that the female is of a redder hue than the male; but the difference is very difficult to determine.

Too much praise can scarcely be awarded to the song

of the Wren. Considering the size of the bird, it is possessed of great power and sweetness, and is repeated again and again, even under most adverse circumstances. Like the Robin, this song is continued throughout winter, and even when snow is upon the ground the Wren's triumphant warble may be heard proceeding from the shelter of a neighbouring bush or hedgerow. As regards food, the Wren seems to be especially gifted with the power of self-preservation. It will pluck the spiders and larvæ from their hiding-places, catch flies and other insects that are found around puddles, especially in farm-yards, and altogether adapt itself to any circumstances.

During the winter these little birds roost in holes in houses, trees, and walls, thatch, hay-ricks, or any sheltered positions; for the sake of warmth they huddle together, and so resist the rigours of our climate.

JAY
(3/8 NATURAL SIZE)

THE JAY

[illegible]
[illegible]

FEW birds [illegible] had the effect of [illegible] its number, for although the Jay is still common in almost all parts of England, it is not what may be termed plentiful. This, too, is because, like most of the tribe, *Jays show a preference to certain* localities, though without any apparent reason, as the regions they affect are generally low waste lands, without the means of subsistence that a neighbouring fertile locality would

THE JAY.

Corvus Glandarius—Pennant, Bewick.
Garrulus Glandarius—Selby, Gould.

FEW birds have obtained such unenviable notoriety as the Jay. Equally with the Magpie abhorred by the husbandman, farmer, and gamekeeper, the Jay, in the reign of George II., was considered such a desperate character, that an Act of Parliament was passed empowering certain authorities to pay a reward of threepence per head for every slaughtered bird. Doubtless this had the effect of lessening the number, for although the Jay is still common to almost all parts of England, it is not what may be termed plentiful. This, too, is because, like most of the tribe, Jays show a preference to certain localities, though without any apparent reason, as the regions they affect are generally low waste lands, without the means of subsistence that a neighbouring fertile locality would

obviously afford. This peculiarity is more noticeable in the Jay, inasmuch as its food is of a more vegetable character than the rest of the decidedly pronounced Corvidæ family.

The home of the Jay is generally pitched in woods, or in plantations known locally as copses, shaws, or spinneys, and from these vantage-grounds this bird lays all the surrounding country under tribute. The food includes, besides insects and worms, the eggs and young of small birds, fruit, such as cherries, peas, and such like vegetables, anything in the shape of corn or grain: indeed, keepers of preserves have to be especially watchful to see that the Indian corn and other food placed for the game is not eaten by the Jays in the neighbourhood.

Doubtless the Jay has his good qualities, and possibly, did he not eat the insects they would demolish more than he does; but the gun of the gamekeeper and trap of the husbandman are still as much directed against the Jay as against the Magpie.

Unlike that bird, the Jay builds an open nest without the dome-like protection, and much resembling a very large Blackbird's nest. The structure is generally hidden amongst the leaves in a thick tree or bush, and composed externally of short sticks and twigs, lined with fine roots and grasses. The eggs are usually five or six in number, of a yellowish-white ground colour, though this colour is somewhat obscured by a multitude of greenish-brown spots, that materially alters the general appearance of the egg, which is also streaked with several lines of black around the larger end.

Jays have usually but one nest in the year, and, like Magpies, the young birds congregate around the district in

which the nest is situated, and from this rendezvous start upon their depredating expeditions.

Even if the small birds (whose unceasing clamour invariably proclaims the arrival of a Jay or Jays in their vicinity) do not make the fact of their presence known, the notorious garrulity of the Jay would attract the attention of the most stolid passer-by. Indeed, gamekeepers often find Jays to be useful detectives, since their continuous chattering is known to determine the presence of some adverse power in the wood wherein they wished to be sole depredators. Therefore the Jay earns universal dislike, for even the poacher knows this bird's proclivities to be so apt to betray his presence, as to completely neutralize the silence of his well-trained lurcher.

When taken young, the Jay makes a nice pet, for his plumage is more beautiful than that of any of his genus. Even the Magpie cannot vie with the Jay in delicacy of colouring or effective contrast. The crest upon the head of this bird is a striking characteristic, as the feathers, which are greyish-white, have a streak of black along the shaft, whilst the ends are tinged with purplish-red, and these, being elongated, can be elevated at will, and may denote either pleasure or fear. From the base of either lower mandible is a broad streak of black, giving the appearance of a moustache. The wing is exceptionally beautiful, as may be presumed from the plate, which nothing over-rates reality. The white feathers upon the lower part of the back are particularly noticeable in flight, which is dull and heavy.

The note of the Jay is far from pleasing, being a rapidly-delivered harsh sort of chatter. Some naturalists have made mention of its song, but say it cannot be heard

at any distance. The bird, however, may with patience be taught to talk in almost equal degree with the Magpie, and somewhat in advance of the Starling. Its powers of mimicry are unusually great, as it will imitate extraordinary sounds very readily, and seems to take a pleasure in doing so. It is singular that, like a great many other birds with these peculiarities, the Jay is naturally inquisitive and somewhat mischievous, and should therefore be carefully watched.

It is almost impossible to distinguish the difference between male and female, their plumage being the same; possibly, as with most of this family, the female may be the larger, but that is at best but a difficult test. In the sunlight the plumage glistens and appears particularly resplendent.

SPARROW
(7/8 NATURAL SIZE)

THE HOUSE SPARROW.

Passer domesticus.—Selby, Bonn.
Fringilla domestica.—Linnæus.

WITHOUT doubt this bird is better known than any other in the world; for there are few countries from which the Sparrow is absent. Equally plentiful in the cities of the East and those of the European Continent, the towns of England would lose one of their most public characters if the Sparrow were eliminated from the streets.

This bird is thoroughly republican in its nature, considering itself to have an equal right of existence with other members of the creation. Intensely self-reliant, the Sparrow contrives to exist under even the most exceptional circumstances, and, though ordinarily well-behaved, can at times show himself a most pugnacious fellow, and when oppressed will valiantly assail

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birds much larger and stronger than himself, such as Starlings, Jackdaws, and even Rooks. However, his quarrels are mostly family quarrels, and invariably originate in the question of the right of possession of a crust of bread, thrown out by some kindly hand. His well-known "chirrup" is at such times changed to a sharp angry note, that almost defies definition, but is known to all.

Unlike the rest of the Finch tribe, the Sparrow has no song worthy of the name, and therein differs most exceptionally from the Goldfinch, whose tuneful twitter, culminating in a clear well-marked phrase full of metallic beauty, and ending in a lengthened "tweet" uttered in an ascending scale, is one of the prettiest songs possessed by the Finches.

The difference in the appearance of the plumage of a country Sparrow, as compared with his town-bred cousin, would be hardly imagined, the fresh bright plumage of the one displaying the prettily-marked black, white, and brown, whilst smoke and dirt hide the beauty of the town Sparrow, so that it is sometimes difficult to distinguish the sex at a glance. The male, however, has a brilliant black throat, and is otherwise more determined in colour, the hen being especially deficient in the bright brown of the wings and the chocolate mark over the eyes.

The Sparrow invariably chooses its home near the habitations of man; and in early spring may often be heard and seen fighting desperately for the possession of some favoured female Sparrow beauty, who, with the conqueror, at once starts housekeeping. The nest is a mystery, and is composed at times of most extraordinary materials, some of which, especially the feathers,

must have been carried for miles; whilst some of the straws tax their strength to the uttermost. Straw, hay, wool, and feathers are, however, the main materials, but they often will seize a stray piece of flannel or old carpet, and give it a place in the nest. This is very large and loose; but much depends upon the situation. To their choice there is no limit, though whilst the eaves, thatch, and water-spouts of houses and farm-yard sheds, trees, ivy, crevices in buildings and chalk cliffs, are their general haunts, even martens are often ejected from their homes, and many another bird has fought a battle for the possession of a favourite spot; but the plucky Sparrow will often turn even Starlings out of the crevice or cranny of a house or church-tower.

In this peculiar nest the hen lays generally six eggs, which are especially varied in colour, though generally pale grey, streaked and spotted with blackish-brown, especially at the larger end, sometimes forming a ring. They will have three or four nests in the year; so that, despite the efforts of those mistaken institutions, "Sparrow Clubs," the bird still continues as plentiful as ever, if indeed its numbers be not on the increase. Except for those now generally defunct clubs, the cat is the Sparrow's worst enemy, many thousands annually falling victims to the wiliness of "puss," who finds that the ivy-clad walls of houses make the most fatal traps for the birds congregating there to roost.

The food of the Sparrow includes almost everything it meets with that is eatable. The reason of its systematic destruction some years past was because of the harm done by it in eating the buds of fruit-trees, notably gooseberries and red currants. Somewhat like the Bullfinch,

this practice seems at times due to pure wantonness, as the Sparrow will even pull primroses and other flowers to pieces, where but little chance of food exists. Again, towards the end of summer, Sparrows become somewhat gregarious, and do considerable damage to the ripe corn; but against this formidable list the Sparrow can show much good done by eating insects and the seeds of many obnoxious weeds; whilst the number of insects taken to feed its young is almost incredible. It is amusing to watch a Sparrow engaged in picking spiders or their larvæ, together with other insects, from the walls of houses or gardens.

The anecdotes related in connection with the Sparrow are without end, some being exceptionally interesting.

White and coloured specimens have been often noted and taken, notably some that were located at the Brighton Pavilion.

JACKDAW
(½ NATURAL SIZE)

THE JACKDAW.

Corvus Monedula.

THIS bird is even more commonly known than the Rook, as it is generally in the neighbourhood of the dwellings of man that it takes up its abode. Like that bird it is also gregarious, and some colonies attain to considerable numbers.

The length of the Jackdaw is about fifteen inches, the female being possibly the larger, but otherwise it is very difficult to distinguish their sexes. When seen in flight the appearance of the Jackdaw seems one uniform black, but upon closer inspection it will be found to have an especially black cap upon the head, and from the ear coverts round to the back of the head a broad patch of grey. The beak, tongue, legs, and feet are black, but the eye is clear bluish-white.

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These birds are to be found generally throughout Europe, and are common to almost

all parts of Great Britain. In this country they affect, as their nesting-places, the holes and crannies of ruins, towers, church-steeples, and other buildings, though often they may be found in chalk and other cliffs or deserted chalk-pits, and at other times will build in the hollows of trees or in chimney-stacks.

The nest is another instance of the wonderful amount of trouble birds will bestow upon its building; not that the Jackdaw's is an elaborate structure, but rather a chaotic arrangement of twigs as a foundation (and these almost infinite in number), upon which is laid dried grasses and straw, with an inner lining of wool (sometimes feathers), or any other soft materials.

The eggs are from four to six in number, though generally five, of a bluish-white, sometimes pale greenish-blue colour, speckled, though more profusely at the larger end, with spots of dark brown and purplish-grey. These eggs are generally deposited in the nest by the middle of May, and the young are hatched about the beginning of June. The young are fed by the parent birds until able to accompany them in their quest for food.

Of the Jackdaw it may truly be said that he is the early bird that catches the worm, for about daybreak he may be seen quitting his haunts in city or town, cliff or tree, and flying towards the neighbouring meadows, pastures, or ploughed fields, in search of food. This embraces so many objects that it is almost impossible to enumerate them. It principally feeds, however, upon worms, grubs, insects and their larvæ, sometimes grain, and, if living near the sea, upon the shell-fish and smaller crustacea cast up by the tide.

It therefore is needless to remark that the Jackdaw

is of immense assistance to the husbandman, and also to the market or other large gardener. This is especially when the young are hatched, as at that time the parent birds, emboldened by the knowledge of the extra demands cast upon them, will visit many a garden near the habitation of man in their search for food; and this, too, in spite of the fact that they are generally as wary of danger as the Rook, and make provision in the way of outposts as mentioned of that bird. About this time Jackdaws may be seen perched upon the sheep's backs, possibly robbing them of their wool, and also doing them a good turn by ridding them of parasites.

The young do not have the grey upon the head until the first moult, and it may be presumed that it becomes lighter with age; it is an undoubted fact that it becomes more silvery in spring and during summer.

The voice of the Jackdaw seems to be comprised in the word "chock," and this may have originated the prefix Jack to the generic name Daw. Some have considered the sound more like "craw," others "caw," but to our mind it is uttered, when seated upon a tower or chimney, as "chock," with a staccato ending. When in flight, however, this note is more often repeated and much more rapidly delivered; especially when a single bird has been delayed and is anxious to rejoin the rest of its comrades; at which time, too, the flight becomes somewhat of a slovenly scramble; though the ordinary flight is much quicker than that of the Rook, and the two birds may generally be so distinguished.

There are few birds that have more frequently been made pets than the Jackdaw. Possibly, from having been

accustomed to the sight of man, much of the fear inseparably connected with his presence seems to be eliminated from the mind of the Jackdaw, and if brought up from the nest (and they are very hardy), they will become exceedingly attached to their keepers. In confinement their favourite food is meat, but they are easily pleased, and in return are most amusing. The droll expression of the half-turned head and the watchful white eye is a marked characteristic; added to this, "Jack" is something of a mimic, and will even learn to talk. He has, however, the failing belonging to the rest of the tribe, and is much addicted to hiding uneatable objects, as our readers may remember is humorously pourtrayed in the Ingoldsby Legend of "The Jackdaw of Rheims."

CROUSE
(3/4 NATURAL SIZE)

THE COMMON GROUSE.

Tetrao Scoticus.—Linnæus, Pennant.
Tetrao Lagopus.—Selby, Gould, Thorell.

BEING a denizen of the British Islands only, the Red or Common Grouse is a bird most particularly to be cared by the ornithologist. There is, however, another [illegible] the minds of many a bird-grouser, reason why the [illegible] of the Grouse should be [illegible] studied, and the [illegible] extreme thereof be [illegible] applied to the [illegible] of [illegible] they may [illegible] the [illegible] results of [illegible] or, by more care in [illegible], otherwise increase at [illegible]. This greater [illegible] is, that the Grouse is most excellent eating! If perhaps will [illegible] admired as his congener the Black Grouse, that may be because of the latter's comparative size and scarcity, for the Red Grouse

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Tetrao Lagopus.—SELBY, GOULD, YARRELL.

BEING a denizen of the British Islands only, the Red or Common Grouse is a bird most particularly to be noted by the ornithologist. There is, however, another, and to the minds of many a much greater, reason why the habits of the Grouse should be particularly studied, and the well-digested outcome thereof be practically applied to the better management of these birds, so that they may escape the devastating results of wet seasons, or, by more care in breeding, otherwise increase in numbers. This greater reason is, that the Grouse is most excellent eating! If perhaps not so much admired as his congener the Black Grouse, that may be because of the latter's comparative size and scarcity, for the Red Grouse

has always held a foremost place amongst toothsome edibles. Again, another reason why ornithological science should be brought to bear upon the Grouse, is that it is a favourite bird of the sportsman, many thousands of acres being annually preserved by rich owners for its propagation.

The favourite home of the Grouse is upon the moors of Scotland and Yorkshire, though the bird affects the North of England generally, and is also found in Ireland; yet, as its Linnæan name implies, it is more particularly a dweller among the heather of the moors upon the hills of Scotland.

The distinguishing features of the Tetraonidæ, or Grouse family, are that the eyebrows are naked (in this and some other species their place is taken by an arch of red); also the legs are clothed, as in the species before us, with a considerable quantity of fine greyish feathers. The shape, too, of the Grouse is peculiar, as regards the breadth of the breast and back in comparison with the height. The length of the male bird is about sixteen inches, whilst the female is generally about half an inch less. The plumage of both is pretty and striking; indeed, the male may fairly be considered handsome, inasmuch as the prevailing colour of his plumage is rich reddish brown; from the head, down the side of the neck, and over the throat and breast this rich colour is much intensified; the rest of the body is pencilled and spangled with black, the feathers being tipped with gold and golden brown. The female is much lighter, and the rich red of the male bird deteriorates to a greyish brown, with golden brown upon the breast; all the feathers, too, are tipped with white over the whole of the body.

The male Grouse is very pugilistic in the early spring,

when breeding-time approaches. The hen generally builds a nest composed of ling and heather, placed in a slight depression of the ground, and sheltered by a tuft of grass or heather.

The number of eggs varies considerably, sometimes ten only being found, and in other nests as many as fifteen. These eggs, which are very handsome, differ greatly in colour, but are generally of a light but rich brown, splotched and streaked all over with a rich red brown. The hen sits closely, and has even been taken by the hand rather than desert her nest. When the young are hatched they leave the nest, attended by their mother, who feeds and defends them with most heroic resolution. They continue thus together throughout the year, and are, in fact, always more or less gregarious. The young birds, from their call-note, are termed "cheepers," and are usually allowed grace by true sportsmen.

The food of the Grouse would appear to be almost entirely vegetable, being chiefly composed of ling and the young shoots of the heather that so plentifully clothes the moors and hills where they dwell; yet many other tender leaves and grasses are eaten by these birds, and even corn is eaten when sown near their haunts.

They generally live amongst the heather, either walking about whilst feeding, or basking in the sunshine near some tuft or bush. Their ordinary call-note is a quickly-repeated note, which is best represented by the phrase, "coc, coc;" but, in the spring especially, and otherwise throughout the year, the bold crow of the Grouse, or Moor Cock, as it is also sometimes called, sounds somewhat like the words, "go, go, go-back, go-back," uttered both as a call of defiance and warning.

It has been ingeniously suggested that some of the "scarce" years are possibly occasioned by the absence of young shoots whereon the birds may feed, and this may be remedied by a more systematic burning of the old heather. Again, there is little doubt but that in-breeding to a great measure deteriorates the stamina of the birds, and therefore it would be expedient in all cases to spare the young birds, or "cheepers;" whilst possibly the mixture of a little Yorkshire blood would improve the Scottish birds, and *vice versâ*.

Damp seasons, however, have most to answer for, and the comparative warmth or dryness of the spring season greatly facilitates the progress of nesting operations, and also tends to increase the strength of the young birds, who consequently are better able to escape the gun of the sportsman during autumn and winter, and so bring fresh vigour into the broods of the succeeding spring.

It is sincerely to be hoped that some means may be devised of keeping the stock of this purely indigenous bird in a flourishing condition, both from motives of sport and pleasure, and also from the (to some) more practical reason of its value as food.

KESTREL (MALE)
(5/16 NATURAL SIZE)

THE KESTREL.

[illegible] its prey, when, upon poised wing, [illegible] drops the [illegible] like a stone to the earth. The [illegible]

THE KESTREL.

Falco tinnunculus.

FOR many years this handsome little bird was subject to a most unwarrantable persecution, but this is now dying out, since systematic investigation has proved that the Kestrel is a bird deserving particular protection, instead of wanton and thoughtless destruction.

The bird is known in many districts as the "Windhover," from the peculiar manner in which it regulates its flight whilst in search of food. This flight is generally rapid, but varies, the onward progress being repeatedly stopped, and the bird sustaining itself in one position, apparently motionless, and, as it were, suspended, whilst with piercing eyes it anxiously searches the grass or stubble beneath; the slightest quiver is sufficient indication of its prey, when, upon poised wing, down drops the bird like a stone to the earth. The unfortunate mouse or other

prey is invariably secured, and the Kestrel then retreats to the shelter of an adjacent tree or hedgerow to devour it. But not alone mice of various kinds, but many another farmer's pest is destroyed by the Kestrel, as its food is varied according to the seasons. In the spring Cockchafers, Grasshoppers, and such-like insects, form its staple food, though possibly an occasional bird or mouse suffers capture; as the summer merges into autumn the Kestrel may be seen hovering over the stubble fields upon the watch for mice, of which destructive little quadruped it is almost as great a destroyer as the Owl itself. This handsome little hawk will also take rats, and has been known to take young chickens, and will even attack as large a bird as a Starling. The Kestrel tears its food after the manner of the rest of hawks. When autumn advances and the scattered corn of the stubble fields becomes exhausted, most mice desert the open fields and take refuge in ricks, rarely showing themselves outside, and therefore the Kestrel too has to look about for fresh hunting-grounds; and so it is, no doubt, that the Kestrel, about this time, becomes more or less migratory. Some merely change their district, whilst others take a more lengthened flight to the Continent.

McGillivray says the Kestrel does not eat birds, but the contrary has been many times proved. Many Kestrels, too, have been taken in bird-catchers' nets when in the very act of attacking the brace, or call-birds, and are, in consequence, invariably driven off when observed. And again, when replete with food, this bird is oftentimes mobbed by an assemblage of smaller birds, who, at such times, congregate together in the common cause quite

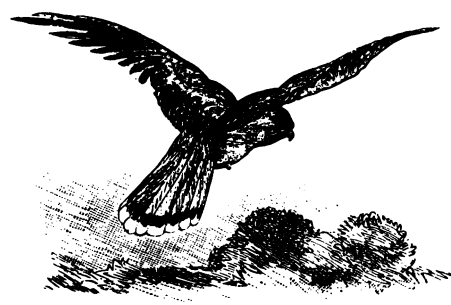
irrespective of species. This is accompanied with an incessant reproachful chatter as if telling of past fears, and appears to greatly incense the Kestrel, until a sudden exhibition of its latent powers disperses the little would-be assailants, and the bird continues its flight to some congenial spot where it may digest its meal in peace.

The plumage of the Kestrel changes with age: the young, though handsome, being much plainer than the adult bird. The general ground colour is a pretty reddish-brown fawn colour, the feathers being striped with black down the quill to the tip, upon the breast, and transversely upon the back, these latter feathers being slightly edged with greyish-brown; the tail is barred with black and the extremities edged with white. After the second year the male bird becomes greyish blue upon the head and neck down to the shoulders, and also becomes possessed of a tail of rather deeper blue, barred with black, and tipped with white, and at the same time loses the spots upon the breast and back. There is little doubt but that the male bird becomes handsomer with age, the plumage at successive moults becoming more brilliant and generally richer in tone, whilst the female becomes darker. The length of an adult male is about thirteen inches, whilst the female attains to about fifteen inches.

The nest of the Kestrel is placed in as peculiar positions as the bird is erratic in its building; in fact, oftentimes it is nothing but the deserted nest of a Magpie, or any other large nest perched in the top of a tree, and even at times it will appropriate the deserted home of a Squirrel; at other times it will build in the crevices of chalk cliffs and chalk pits. The eggs are usually from four to five in number, having a ground colour of dirty

pale-bluish white, so blotched over with reddish brown as to greatly obscure the primary colour.

As may be inferred from the nature of its food (the capture of which essentially demands a watchful silence), the voice of the Kestrel is seldom heard. It is possessed of a harsh querulous kind of scream, uttered more particularly whilst devouring its food; though when disturbed it utters a rapid kind of screaming chatter.



ROBIN
(Erithacus rubecula)

THE ROBIN.

Sylvia rubecula.
Erythaca rubecula.

MOST popular of all our song birds, next familiar to the Sparrow, and rivalling the latter in its confidence, the Robin holds a position in the minds of all the English race nearly amounting to superstition. And this for various reasons, inasmuch as the Robin is not only almost without reproach as a garden marauder, but is also an efficient member of that self-constituted bird police which keeps down the number of garden pests, and without whose aid the horticulturist would almost entirely fail. Then, again, the Robin has a most exquisite song! composed of strains of great tenderness and beauty, as well as sweetly-modulated execution. As this song, although somewhat lost in the general chorus of the summer songsters, is continued more or less throughout the year, and especially during

winter, when the voices of almost all other birds are hushed, the distinctive warble of the Robin comes most gratefully to the ear, particularly so to the dwellers in towns. When winter has set its icy seal upon the woods and meadows, "Bob" (as the Robin is sometimes familiarly called), despairing of food in the sylvan haunts of summer, repairs to the habitations of man, well knowing that the reward of its beautiful song will be forthcoming in the shape of crumbs, thrown out by the lovers of Nature's less gifted but beautiful creatures.

The plumage of the Robin is composed generally, upon the head, back and tail, of olive-brown, but upon the cheeks, throat, and breast it is a rich orange-red (from which its name of Redbreast is derived); this is bordered with bluish grey, terminating in white upon the under parts. The female so slightly differs that it is almost impossible to distinguish the sex, although it may be that she is less brightly coloured, and possesses eyes less full and bold. The young Robin, however, is clothed in entirely different plumage, the entire upper part being yellowish olive-brown, mottled with orange and buff, and tipped at the extremity of each feather with pale olive-brown; the chin, throat, and breast are dull reddish-brown, but this colour is materially altered by the feathers being margined with darker brown.

Perhaps no other bird has built its nest in so many erratic positions as the Robin; reason seems to have no influence over its choice. With a superfluity of admirable sites close at hand, the most ridiculous positions are often chosen; and were it not for the immunity from persecution enjoyed by the Robin, indeed we may say the protection afforded, this reckless choice of a nesting-place would

often be the occasion of sad disaster. As it is, "pussy" is the Robin's worst enemy; for even the most reckless schoolboy, or other bird-nester, has a feeling of almost religious reverence for the nest of "poor cock Robin."

Sometimes their choice falls upon a flower-pot or old kettle, at others upon a hole in a wall; but Robins generally build in a hole in a bank a nest composed of leaves, dry roots, grass, and moss, with a lining of hair, together with a few feathers, and therein the female lays from five to seven eggs of a delicate pale reddish-white freckled with darker red spots, which are sometimes gathered more thickly at the larger end, and will even form a ring, though specimens have been found of a pure white. The young are principally fed upon small worms and caterpillars, but the food of the parents also embraces other insects, such as spiders and their larvæ, together with fruit and berries. The young leave the nest in about a fortnight, and in about a similar period will provide for themselves; when the parent birds commence building a new nest, having two or three in the course of the season.

In the winter the Robin establishes himself in an inhabited district—generally in a garden adjoining a house—and will defend his supposed domain with great pugnacity, especially against one of his own tribe. They are particularly bitter against one another, and will sometimes kill the intruding foe or die themselves in defence of their haunt. These conflicts are almost invariably commenced by a vocal contest, intensified as the rivals approach, and it is then that the Robin's call, "tsit, tsit," is heard most plainly; they have also a peculiar

wail, uttered generally towards roosting-time, and of a very melancholy nature.

Formerly it was thought to be particularly unlucky to keep a caged Robin, and the accidental advent of one through the open window was, in certain parts of the country, held to be a sign of a coming "death in the family." These superstitions, with many another, are so very deep-rooted as to obtain to a great extent at the present day.

The Robin is exceedingly inquisitive, and will infallibly inspect every fresh-turned flower-bed, possibly in search of food, though anything fresh or extraordinary has a very great charm for this favourite bird.

RED POLLS (MALE AND FEMALE)
(7/8 NATURAL SIZE)

THE REDPOLL.

Fringilla Linaria—LINNÆUS.

THIS bird, named by McGillivray *Linaria minor*, on account of its being the smallest of several kinds of Redpolls, is also known by the name of Redpoll, and is the smallest of our list of Finches. Undoubtedly, its name was derived from the deep crimson red upon the crown of the head, which is less by far upon the female. The adult male has, in addition, a handsome red breast, which in some is of a bright vermilion, deepening in others to a rosy red, which colour may also be found upon the rump. The female has a ground colour of grey, streaked with brown, and has merely the distinguishing red upon the head, and this of lesser brilliancy.

The Redpoll is a native of Sweden and Norway, and some parts of Germany, where the birds breed. They are generally known upon the rest of the continent of Europe, and migrate to

this country, as does the Siskin, during the autumn, generally commencing to arrive about the second week in September; and the young male birds, even then, show signs of the red breast, having, at such time, a pink shade pervading those feathers.

These interesting little birds are gregarious, and therefore very susceptible to the allurements of the bird-catcher's call-bird. During the winter they feed upon the seeds of the alder and birch trees, and upon buttonweed and such-like seeds. In districts where such food abounds, Redpolls are very plentiful, and, if disturbed, will rise almost simultaneously with a musical sort of chattering twitter, and settle upon the nearest tree. They are, however, very tame and approachable; and even if a stone be thrown at them will, if compatible with any degree of safety, return to the same tree. The report of a gun, and the terrors of the rattling shot, cannot altogether quell this daring disposition. As alder trees generally grow near water, it is in such localities that the Redpoll is most frequently found, and then, too, in considerable numbers, sometimes as many as two or three hundred congregating together. Waste lands or commons are also much frequented by this enterprising little bird.

Many instances have been quoted of Redpolls breeding in this country. Morris mentions a nest found at Shanklin Chine; Selby asserts that he found a nest in the North of England; and another pair were, during the year 1882, found breeding near Oxford, in which year also several nests were found in Norfolk. A pair once bred in our garden in an elder bush about six feet high; but this pair were found to be escaped birds, as possibly may have been those instanced above, though it cannot be denied

that birds delayed in migration might make up their minds to colonise in this country. Still, the comparative scarcity of such instances would go to refute such a supposition, and the "escaped bird" theory would probably be the more correct.

The nest so found by us near Brighton was small, but prettily built, with a foundation of twigs, dry grass, stalks, and moss, intermingled with the down of the catkin of the willow, which forms a beautifully soft lining; and this description tallies to a great extent with that of Mr. Selby.

About April, or the beginning of May, Redpolls commence their return migration, which is evidently of an erratic nature, as some of the birds are in full plumage as regards the red breast, whilst the general plumage is lighter, which would almost lead us to suppose that these birds had wintered in Southern Europe; but being of a gregarious nature, it is very difficult to distinguish the arrival of these fortunate strangers. Certain it seems that with age the distinguishing colour deepens and also brightens, although this rule is completely reversed if the bird be kept in captivity, as in that case the red entirely disappears from the breast and rump, and in process of time also from the head, its place being taken there by a greenish gold.

Although so small, the Redpoll is a very hardy bird, and from its extreme docility is a particular pet, especially with children. Being so plentiful, the price is extremely small; therefore it is that, despite the very meagre song of the Redpoll, which is limited to two notes and a call-note, generally represented by "pe-weet," often repeated, this little bird may be found in every bird-seller's shop, and generally receives a home in every aviary. But especially

is the Redpoll kept by lovers of birds, from the fact that its docility will allow it to be taught many interesting tricks. Besides eating from the feeder's hand, it will learn to draw up water in a glass cup or bucket from the well arranged in cages for the purpose, or open the lid of the seed-box, or, again, draw each receptacle up an inclined plane, together with other amusing tricks, which may be easily taught by patient owners.

RINGDOVE
(1/3 NATURAL SIZE)

THE RINGDOVE.

[illegible]

THIS bird is perhaps more generally known in country districts as the Wood-pigeon, whilst it [illegible] to some localities [illegible] of Cushat, which [illegible] more generally [illegible] influence.

[illegible] of the Ringdove [illegible] by [illegible] in the [illegible] plentiful. [illegible], according to the [illegible] of the lesson's thoughts or mental [illegible], the soft "coo-coo, [illegible]" has a soothing, sometimes a melancholy influence; and we have known persons particularly irritated by the wearisome iteration. [illegible] poetry would do without the [illegible] and reputed [illegible] of the Dove as a rhyme to "love," only those who have never scribbled verse can tell.

RINGDOVE

THE RINGDOVE.

Columba Palumbas.

THIS bird is perhaps more generally known in country districts as the Wood-pigeon, whilst it also possesses in some localities the name of Cushat, which latter name more generally applies to poetical references.

The voice of the Ringdove must have been heard by everyone in the habit of walking in the country where trees are plentiful. Sometimes, according to the tenor of the hearer's thoughts or mental condition, the soft "coo-coo, co-co-cooo" has a soothing, sometimes a melancholy influence; and we have known persons particularly irritated by the wearisome iteration. But what poetry would do without the voice and reputed faithfulness of the Dove as a rhyme to "love," only those who have never scribbled verse can tell.

The length of the Ringdove is from 17½ to 18 inches. The plumage is of a generally distributed slate-colour; upon each side of the neck is a patch of white feathers, surrounded by a ring of bright green and some purple feathers, from which circumstance its name Ringdove is derived. When in flight the white feathers upon the wing will at once determine its denomination. The plumage of the hen is generally less brilliant.

As may be imagined from one of its names, these birds inhabit wooded districts, and are to be found throughout the British Isles and Europe generally. The nest is usually built upon the forks of trees, sometimes but from six to eight feet from the ground, yet at others from that height up to the top of the tree. They will also often build their nest in ivy. This nest is built of twigs, loosely laid upon the forked branches, and of so light and fragile a nature that the eggs and young may often be discerned from beneath. In connection with the nest of this bird, we cannot forbear from quoting a local anecdote. The Magpie was instructing the Dove in nest-building. "You place twigs thus and thus, and others thus and thus, interlacing." "Oh, I see!" said the Dove. "Go and do it, then," said the Magpie, who now has a covered nest, whereas the anticipatory Dove has but a poor framework of a foundation for a nest, which seems made simply to be blown away. How unlike, for instance, the beautiful nest of the Chaffinch or the poor little Wrens! These seem to provide against every eventuality; but the thoughtless Ringdove seems to imagine that there can be no storms, that the branches of the trees cannot move beneath the influence of the wind; and, as a consequence, the two white eggs or the young are often blown from the nest and destroyed.

The shape of the eggs, which are but two in number, is a rounded oval; and they are pure white in colour. They are esteemed by some to be delicious eating.

Two broods are usually produced in the year; but, especially if mishap has befallen either of the previous nests, they will sometimes have three. Both parents assist in the duties of incubation. The young are partially covered with yellow down, and do not obtain their full sight for about nine days. Their plumage is not so bright as that of the adult bird, having a brownish tinge; and the ring upon the neck is not obtained until after the first moult.

Although Wood-pigeons drink but seldom, they feed to repletion, and retire to digest their meal in quiet. The food consists of corn and grain, beechmast, peas, tares and vetches, acorns, and in hard times even hazel-nuts; it is therefore entirely of a vegetable nature; in fact, this is one of the few birds that totally abstain from insectivorous or carnivorous food. They also feed upon the young shoots of turnip-tops. Being of a gregarious nature, many of these birds (sometimes even in company with the domesticated pigeon) will assail a corn or other seed-sown field, and, with stately step and nodding head, speedily demolish any seeds or grain that rain or other adverse circumstances may have left exposed. At these times, however, they do not allow themselves to be taken at any disadvantage; but, as with the Rook and Starling, they place vedettes around, who give due notice of any intrusion or danger.

The minds of farmers and others are considerably exercised as to whether the Wood-pigeon, or Ringdove, repays for the corn, &c., devoured, even when the bird is in turn eaten amid all the savoury surroundings of pigeon-pie.

The ordinary flight of the Ringdove is very strong and rapid. If disturbed whilst sitting upon the nest, the bird seems to commence her flight in a blundering style, accompanied with a peculiar clapping or flapping of the wings, which may be heard at a considerable distance, especially when several commence flying simultaneously. And this peculiarity occurs even during their ordinary flight.

WRYNECK

(1/3 NATURAL SIZE)

NUTHATCH

THE WRYNECK.

Yunx Torquilla.

ALTHOUGH found in many parts of England, this bird is not generally known, and many who have heard its note have been at a loss to distinguish the utterer; and this for the great reason that the Wryneck is with difficulty distinguished, on account of the colour of its plumage, and, again, because its general haunts are wooded districts. It is in parks, avenues of trees, or other well-protected positions where trees are plentiful, that the Wryneck will be most usually found, but this particularly in the east and south of England. It is also, though rarely, found in Scotland, but seldom in Ireland.

The name "Wryneck" is derived from the extremely erratic movement of the neck of this bird when in a state of fright or ordinary pleasure. At such times the neck twists and

wriggles in very similar manner to a snake, and from this peculiar movement the Wryneck is known in many districts as the "snake-bird"; but this name also applies to the plumage, since this bird is arrayed in feathers somewhat resembling the common snake in colour and general arrangement.

It is a plain greyish-coloured bird, pencilled, barred, and mottled with brown in a most elegant manner, and darker upon the back and wings. The chin and throat are yellowish-white, and the breast white, all barred transversely with black. The female greatly resembles the male, though the plumage is not generally so bright.

The flight of the bird is very dull and heavy in comparison to its size. Yet it is migratory, leaving this country in September, and returning about the beginning of April, just before the cuckoo; and from this circumstance is derived its local name of "cuckoo's mate." It is also known as the "tongue bird," from the fact of its tongue being particularly long, and of a silvery appearance. This is the more noticeable when the bird is in pursuit of its food, as the organ is darted out in a most rapid manner, and withdrawn just as suddenly, seldom having missed securing the object aimed at.

The general haunt of the Wryneck is upon a sunny bank or the dead branch of a tree. Although it sometimes ascends the trunks of trees, it does not use its tail as a support, the same as the Creeper or the Woodpecker, but generally runs along the branches in search of the various insects or larvæ secreted in the bark, though the principal food consists of ants and their eggs. Even though the beak is differently constituted to that of the Woodpecker tribe, this bird appears to be the link between those birds and

the Cuckoo, having many of the attributes of either, as it is decidedly non-gregarious, being almost invariably found singly, or at most in pairs.

The nest is built in various places, inasmuch as it will sometimes be found in the deserted hole of a Woodpecker, whilst at others the bird will choose a hole in an old decayed tree, often beside a country road, though generally in a more wooded locality. This nest is composed of moss, wool, hair, and grass-stalks, laid upon a foundation of decayed wood. The eggs are eight or nine in number, but have varied from five to twelve, and are of a pure shining white. The same nesting-place is resorted to several years, as the birds seem to be very much attached to their familiar haunts. The young are fed principally upon ants and their eggs, with a few caterpillars and such-like insects.

In connection with the snake-like appearance under some circumstances, especially if wounded, it may be added that the Wryneck will even hiss as it writhes and twists its neck. Indeed, so peculiarly snake-like is its appearance at such a time, that many have been deterred from taking it into the hand, so much did the bird resemble that much-abhorred reptile. The young, too, have the peculiar power of the adults, and will hiss if disturbed in the nest. These various circumstances make up one of the most singular instances of what is called "protective mimicry" in the animal world.

Although generally living in unfrequented positions, the Wryneck is not a shy bird, but if approached will show a certain amount of disregard for the observer, not flying away if disturbed, but contenting itself with simply running along the branch.

Its call is said to be varied; the general utterance of the Wryneck is one clearly-defined note delivered in succession, and which may be well represented by the phrase "Peel, peel, peel," each note repeated some eight or nine times. As before mentioned, it also hisses; and it has been remarked to have a peculiarly soft note during the nesting season.

The Wryneck is about the same size as a Lark, being about seven and a-half inches in length.

THE GOLDEN-CRESTED WREN.

Sylvia regulus.
Motacilla „
Cristatus „

THIS is the smallest of European birds. It is but 3½ inches in length, but is exceptionally pretty. Whilst the birds are in flight or in pursuit of food it is difficult to determine the sexes, as at such times the distinguishing crest is partially closed over by the black feathers on either side; but if influenced by pleasure or other excitement, the crest is expanded, covering the whole of the head, and upon inspection, it will be found that the male has a broad orange (the female, lemon) streak from the forehead over the crown of the head. The whole of the upper part of the body is olive-green, but lighter towards the tail-coverts; the under part is greyish-white, shaded—especially on the cheeks, throat, breast, and flanks

—with buff. The wings and tail are olive-green, but the flight-feathers are edged with yellowish-white, and prettily barred with white, which is very perceptible in flight.

Although so diminutive, the Gold-crest is to be found in countries where the climate would appear to be altogether prohibitory to so small a bird; but the poor little creature seems somehow to exist, even amid the snow and frost-bound wastes of Siberia, and positively revels amidst the pine-clad hills and mountains of Norway and Sweden; indeed, the race would appear to particularly affect the north, and it is chiefly in such countries that these birds build and make their homes.

Though their powers of flight are necessarily restricted, the Gold-crest is a partially migratory bird, for although many stay in England throughout the winter, yet a number leave us. Another peculiar migration occurs in October, when these birds visit gardens in the south in such considerable numbers, that in 1882, in a garden at Brighton, a boy killed with a catapult as many as twenty birds in one day. At these times, in spite of their gregarious habits, they are continually fighting one another.

Although their diminutive size often enables them to evade observation, the Gold-crest is not a shy bird, but will allow an observer to approach within a few yards; indeed, it would seem as if fear in a bird's mind increased in direct proportion to its size. Gales seem to have a great effect upon this pretty little bird, and it is more generally seen immediately after one of those disturbances of nature. Indeed, it would appear that wind has a much more distressing influence upon these birds than even frost or snow.

The usual song of the Gold-crest is weak, but very pleasing, and much resembles that of the Common Wren. Its call is a shrill but weak note, most nearly represented by "tsit, tsit."

Their muscular powers appear to be weak, as they seldom hop from place to place without calling in the assistance of the wings, which they seem to be always flapping whilst in pursuit of their food, for they flutter around and underneath the leaves, and pick off the insects that may have taken refuge there. They are most indefatigable in their search, calling to one another meanwhile, and so searching branch after branch, ridding them of any small insects that may be found, but especially small winged insects—or, according to the season, their larvæ—for it is upon such food that the Gold-crest feeds.

This bird breeds early—usually during March—building its nest generally in a fir-tree, but sometimes in yews, or even in a laurustinus. The nest is dome-shaped, with a small aperture at the side, and not built upon the branches, but suspended therefrom, and at various heights from the ground, sometimes but five feet, varying to ten feet. The nest is built chiefly of green moss, lichens, caterpillars' cocoons, and the down of the flowering willow; this structure is lined with feathers, but the exterior much resembles in appearance the branch upon which it is suspended. Observant dwellers in the country may have often noticed these nests, apparently deserted and unfinished. The reason is that, like the Common Wren, this diminutive bird makes various efforts in the way of nest-building before an edifice or its site gives satisfaction; but when such is finally the case, the female deposits therein a various number of tiny eggs—though

large for the size of the bird—usually eight or nine, of a pale flesh-colour, but so thickly spotted with reddish-brown as to comparatively alter the ground-colour. These spots, as a rule, form a ring at the larger end. The young are fed similarly to the parent birds, who are most earnest and painstaking in their endeavours to supply their callow brood with food.

The young resemble the adult birds in general plumage, but are not so bright, and no yellow appears upon the head until after the first moult.

The Golden-crested Wren may be kept in the aviary, but with great difficulty, as the food necessitates constant attention; whilst their size is such, that the slightest mishap occasions death. One or two cases are, however, known in which the bird has been bred and reared in captivity.

WHITETHROAT

(½ NATURAL SIZE)

THE WHITETHROAT.

[illegible]

[illegible] Whitethroat is decidedly the [illegible] of the Warbler tribe, and may be found more or less plentifully throughout England, especially towards the south. These beautiful and elegant birds frequent gardens, thickets, hedgerows, or the outskirts of woods; and, unlike most of the Sylvia tribe, will even make a home upon the hill-sides, amidst the furze and brambles.

From a habit of frequenting, and even building, amidst nettles, this bird is known in many districts as the "Nettle-Creeper."

The Whitethroat is about 5¼ inches in length; the head and neck are grey; the back, too, is grey, [illegible] shaded deeply with brown. The [illegible] is dark brown, the feathers being [illegible] the two outer feathers, however, [illegible] is most distinctly perceptible

THE WHITETHROAT.

Sylvia cinerea.
Motacilla „

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From a habit of frequenting, and even building, amidst nettles, this bird is known in many districts as the "Nettle-Creeper."

The Whitethroat is about 5½ inches in length; the head and neck are grey; the back, too, is grey, but tinged deeply with brown. The tail is dark brown, the feathers being edged with rust-colour, the two outer feathers, however, are greyish-white, which is most distinctly perceptible

in flight. Like the tail, the wings are dark brown, each feather being edged with a light rusty brown; the throat and belly are white; the breast, sides, and vent are very pale grey, tinted in a beautiful manner with a delicate rosy flesh-colour.

The Whitethroat is non-gregarious, for, although many pairs may be building in a neighbourhood, they do not associate, as with some birds, but keep strictly to themselves; and, indeed, it is seldom that even a pair are seen together, each seeming to have its separate walk in life.

The male birds arrive in England several days before the females, as is the case with others of the Sylvidæ, and they are generally here by the second week in April. When they have paired, they fix upon a nesting-place, which, however, is in most varied positions: sometimes in a hedgerow (even close to a road), in the furze upon the sides of hills, or waste lands; at other times in a bush in a garden; but oftener perhaps in brambles, or the bushes of the wild rose that grow among little thickets, which the hand of the modern practical farmer has left untouched.

In the security of this prickly retreat the pair of birds build a deep nest, thinly constructed of dry grass, lichens, and wool, lined with horsehair, and therein the female deposits from four to five eggs: their colour is a dirty greenish-white, spotted and speckled with green and brownish-grey.

During nesting-time especially, the male bird sings his song under varying circumstances, and consequently in varying manner. He seems at this time, however, to be somewhat pugnacious, as when singing he elevates

the feathers upon the top of the head, and so forms a crest. The song has been variously described, but to our mind it is decidedly pleasing. It consists of a pretty phrase uttered in a joyous manner, and accompanied with many odd jerks and gestures. The usual mode of delivery is whilst the bird is fluttering at a height of about twenty feet, having risen from the spray of bramble upon which it was sitting. Thus, with butterfly-like motions and jerking neck, it utters its carol, and then suddenly drops with subsiding song into the bush it had quitted so shortly before. The call-notes of the bird are very varied. At times it sounds somewhat like "hived, hived;" again, like "cha, cha;" and at other times like "purr, purr"—each note doubtless expressing some distinct phase of the singer's feeling.

The Whitethroats at certain seasons are real friends to the gardener, as their food, and that of their young, is then almost entirely insectivorous. They live principally upon caterpillars, small beetles, and winged insects, catching the latter in an adroit manner whilst upon the wing; but as summer advances the Whitethroat takes toll of currants, raspberries, and strawberries, and in autumn elderberries are the staple food.

The young do not obtain the bluish-grey upon the head until the succeeding spring, the feathers meanwhile being brown; neither have they the beautiful delicate shade of pink upon the breast until we see them again in England in the succeeding spring, upon their return migration. The autumn migration commences in September, and continues until October. Instances have occurred of their remaining later, an individual bird having been observed even in December; but this is rare.

As is the case with many other birds, if disturbed whilst sitting upon her nest, the female will often simulate being wounded, and flutter off, in the hope of attracting the intruder's attention from her nest. Therefore the nest is easily found if the hedgerow is beaten.

From the sprightliness of its nature, no less than its delicate beauty, this bird is well worthy a place in any moderate-sized aviary, especially as its pretty song—delivered, too, whilst upon the wing—is not its only attraction, for the Whitethroat will become very tame, and eat its food—especially mealworms—from the hand of its keeper. However, being a migratory bird, it will in most cases require artificial warmth, or at least that of a conservatory or sitting-room, during winter.

THRUSH
(1/2 NATURAL SIZE)

THE THRUSH.

Turdus musicus.

WELL distinguished as the "Song Thrush," this bird, as such a name denotes, is possessed of one of the most melodious voices to be found in the list of British song birds.

Thoroughly familiar to us, and exceedingly popular as a cage-bird; but beautifully as the Thrush will sing in confinement, it is when, in early morn, or as evening twilight advances, the Thrush has taken up a favourite position upon the withered bough of a tree, that his song is heard to the greatest perfection. Clear, yet full of mellowness—now pealing out a phrase of wild bluff heartiness, and anon with long-drawn note tinged with exquisite pathos—the song of the Thrush strikes a responsive chord in the heart of every hearer. Infinitely under the name of the Mavis and

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Throstle, the bird has had a prominent position in the world of poesy from the earliest times. Its beautiful song commences early in January, and is heard throughout the whole year, with the exception of moulting time.

The Thrush is a fine, handsome bird, with pretty, though somewhat colourless, plumage. The whole upper part is olive brown, somewhat deeper coloured upon the head and neck. The throat is a yellowish-white, partially speckled with dark brown spots; the breast is pale buff, tinged more darkly on either side, and from the throat down to the thighs flecked with very dark brown triangular spots. The sexes may with difficulty be distinguished, except that the male is possibly smaller, whilst the female has larger spots upon the breast, and not so much buff. As, however, the female is mute, the song supplies an unerring guide.

Though of some size—*i.e.*, 8½ inches in length—this bird does not walk, but when upon the ground proceeds with a series of leaps or hops; the flight, however, is rapid, and capable of being sustained for a considerable distance; yet the Thrush is only a partially migratory bird, most individuals remaining with us throughout the winter. At that season, however, a considerable migration appears to arrive from the north, possibly driven south by snow or hard weather.

It is seldom that more than a pair of Thrushes are seen together, except at the period of their forced migration in winter; and even then their numbers never attain to the extent of the flocks of Fieldfares.

The general abode of these birds is in the neighbourhood of gardens, plantations, hedgerows, and thickets; yet there is little limit to their choice, sometimes living in well-watered valleys, and again among furze and thickets upon

the hill-sides, where water must perforce be somewhat scarce.

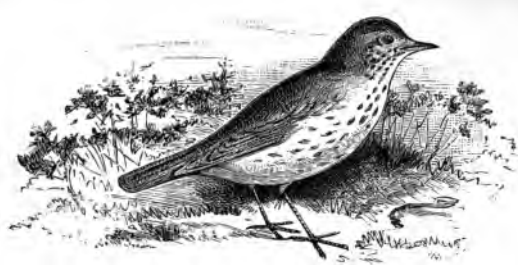
The nest is generally placed in a hedgerow or thicket, or in furze; but the position is varied, and greatly depends upon circumstances. Sometimes they are very shy in their choice of a nesting-place, and again will at times select a position which demands from them the most fearless confidence: some having placed their nest in a shrub or bush in a garden, or near a house, where it was possible for passers-by to observe their eggs or young. The nest is formed externally of small twigs, fine roots, green moss, and leaves, with a lining of mud. The eggs are generally five or six in number, of a light greenish-blue colour, speckled with black spots, especially at the larger end, where they often form a well-defined ring.

The young are fed with exemplary assiduity by the parents, chiefly upon insects, until, being able to provide for themselves, they are thrown upon their own resources by the old birds, who start building another nest.

The usual food of the Thrush is such as to make it especially valuable to the gardener and husbandman; for although in summer it may feed upon different kinds of fruit, yet its diet chiefly consists of insects, caterpillars, worms, and snails; among the latter especially may be included those that so greatly infest wall-fruit trees (notably apricots and peaches). The shell of this snail, however, is comparatively hard; and the Thrush, therefore, to obtain the dainty within, dashes the shell against a large stone in a most adroit manner, until the shell is crushed. Hence, it may be freely admitted that the few fruits purloined in summer have been well earned. In winter the Thrush feeds principally upon snails and berries.

he "call" of the bird is a short, harsh cackle; but unless disturbed, it is generally silent. The "song" of the male has already been described, and is amongst the most conspicuous of all the melodious notes which fill the air, even in the neighbourhood of large cities.

Thrushes will breed in a large aviary. If confined in a cage (which should be large and have wooden bars), the Thrush will often become tame enough to feed from the hand; it will, however, require constant cleaning, as it is very apt to scatter its food. A little fruit in summer will be a treat, as also an occasional snail.



SISKIN (PAIR)

(4/5 NATURAL SIZE)

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SISKIN (PAIR)

THE SISKIN.

Fringilla Spinus.—LINNÆUS.
Der Zeizig.—BECHSTEIN.

IT has often been matter for surprise that this sweetly docile, pretty, and amusing little bird is not better known, though certainly its merits are fast attracting attention; and before long, if the supply of Goldfinches becomes exhausted, the Siskin may possibly supply its place as a cage-bird. Better known in London, and in some other parts of England, as the Aberdevine, it may be that the double name has mystified amateur ornithologists; but from the numbers lately imported from Germany, it is seldom that a well-constituted aviary is destitute of one of these sprightly little birds.

Since no mention of the bird appears in the Rev. Gilbert White's "History of Selborne"—and he was a most observant and true naturalist—it would

appear almost as if these little winter visitants were unknown around that district.

The plumage of the Siskin, together with its other natural advantages, gives it a very high position in the list of Finches. Its beauty is indeed beyond gainsaying, a brilliant lemon-yellow pervading its plumage throughout; and this colour is thrown into especial contrast by the deepness of the black of the head and rest of the plumage.

Several instances have been recorded of Siskins breeding in confinement; and it may be that the patience and perseverance of breeders may in the dim future make the Siskin a rival progenitor to the original Green Canary. The Siskin even at the present day mates freely with the Canary; and the mules produced are handsome birds, and especially sweet songsters.

This interesting little bird is probably a native of Norway and Sweden, although found breeding in certain districts of Germany. What more concerns our present readers is the fact that the Siskin has been found breeding near London, although it is extremely possible that these instances—as remarked of the Redpoll—were merely escaped birds. Yet it has been proved from the time of Yarrell that many nests existed in the pine-trees of Scotland; and an enthusiastic ornithologist of the present day, Mr. Booth, of the Dyke Road Museum, Brighton, was fortunate enough to find an unmistakeably wild nest whilst he was sojourning in Scotland.

The nest is thus described by Morris. "It is placed in trees, at only a short or moderate height from the ground, and is composed of stalks of grass and small root and fibres, moss and lichens, lined with hair, rabbits' fur, thistle-down, wool, or a few feathers." Bechstein, how-

ever, thus :—" It prefers building in forests of pine or fir, and places its nest on the highest bough of one of those trees, or sometimes on the branch of the alder. It is fastened to the bough with spiders' web, coral moss, and threads from the cocoons of various insects, and is cleverly constructed of these materials, woven together with small twigs, and lined with very fine roots."

The eggs are of a greyish-white, spotted thickly, particularly at the larger end, with purplish-brown, and are generally five or six in number.

The migratory appearance of the Siskin in this country is somewhat erratic, and is in keeping with the mystery that enshrouds some other of the proceedings of its life. In some years a considerable migration arrives in England from the north, which would almost point to the fact that these little birds must have crossed the German Ocean ; or it may be—for their numbers so considerably vary—that these are merely the birds bred in Scotland. In other years—and this appears to be the real migration—the movement proceeds from Norway and Sweden *viâ* Germany, picking up the stragglers in that country, and so to the south of England.

Bechstein observes that the male generally loses the black of the throat in the moult of the second year ; but this is not a uniform rule, as we have known many varying specimens. The birds, however, invariably increase in brilliancy and beauty of plumage with age.

The food of the Siskin whilst in Norway and Sweden seems to be the seeds of the firs and pines. In the autumn, Bechstein says they exist upon the seeds of the thistle and burdock. In England, in October, they feed upon buttonweed, and in winter and early spring subsist upon alder

seeds, the small buds of various trees, and the seeds of fir cones.

The song of the Siskin generally commences with a phrase somewhat common with the Linnet, finishing with one which may be represented by "gurgle geeter jaaa." The usual note, however, is a pretty, tuneful, but jerky twitter, often marred by the harsh note "jaaa." The ordinary call, which is often repeated, is somewhat after the manner of the Redpoll, and may be described as a little more metallic "keet." When given in warning, before taking to flight, it is "chuck a chuck keet."

GREENFINCH

(1/4 NATURAL SIZE)

THE GREENFINCH

Oenothraustes chloris.
Fringilla chloris.

THE Greenfinch is perhaps the least interesting of the Finch tribe, if it be possible to imagine any of the family less interesting than another; but it is only [illegible] to speak this bird in [illegible] to discover very [illegible] of that [illegible] all living [illegible] particular work [illegible] of life.

Handsome in [illegible] the Greenfinch would be, [illegible] certain sober-coloured [illegible] much predominate. In [illegible] the bird is somewhat [illegible] from which circumstance [illegible] known in some districts by the sobriquet of "Green Chub." It is also known to the "Green Linnet," though [illegible] dissimilar from the [illegible] Linnet, both in form and plumage. Its flight is varied according to

GREENFINCH

THE GREENFINCH.

Coccothraustes chloris.
Fringilla chloris.

THE Greenfinch is perhaps the least interesting of the Finch tribe, if it be possible to imagine any of the family less interesting than another; but it is only necessary to watch this bird in its natural condition, to observe very many instances of that inscrutable instinct which teaches all living nature its own particular work in the economy of life.

Handsome in plumage the Greenfinch would be, did not a certain sober-coloured grey so much predominate. In form the bird is somewhat heavy, from which circumstance it is known in some districts by the sobriquet of "Green Chub." It is also known as the "Green Linnet," though totally dissimilar from the sprightly Linnet, both in form and plumage. Its flight is varied according to

the season: in the spring the male flies with a motion somewhat similar to that of the Swallow, and utters its song in the fulness of its heart whilst upon the wing; but when the exuberance of summer has subsided its flight becomes modified, and though still quick and strong, is quite straight, with a very rapid movement of the wings. When collected in flocks, the birds fly closely together, and make a splendid chance shot for the embryo sportsman. They are also easily caught in a net or trap; the gullibility of a Greenfinch being remarkable; perhaps their habit of congregating together makes the attraction of a brace, or call-bird, doubly enticing.

The hen is somewhat similar in appearance to the male bird, but is shorn of the glory of the brilliant yellow that forms his chief attraction, a dull, greenish, leaden grey being the prevailing colour of her plumage.

Greenfinches generally build their nest in high and thick hedges, but are very easily pleased with a building site, often choosing bushes, especially elder or evergreens, and sometimes the small lower branches of a tree. The nest is somewhat loose as regards the exterior, which is composed of twigs and a lot of moss; but they study the comfort of the interior more narrowly, lining it softly with wool, feathers, and horsehair. The eggs are generally five or six in number, though as many as seven have been known. In about fourteen days the young are hatched, and are fed by the parent birds until old enough to leave the nest. Their appearance at this time is very different, being greenish-grey upon the upper parts, and with this colour as a groundwork, streaked with dark brown upon the back, breast, and throat. Their mouths are of a dark crimson inside when in the nest, and are always open

for food. A pair of birds will build as many as three or four nests in a year.

The young, upon becoming full-fledged, will all fly out of the nest together at the slightest imminent danger; as many a schoolboy may remember, when, after watching a nest with exemplary patience, he finds his treasure escape him just when he had made up his mind to possess it. The parent birds, when disturbed upon the nest, do not fly far away, but continue around, uttering most melancholy lamentations. The exceedingly plaintive tone of their long "tway" is enough to strike remorse into the heart of the most inveterate bird-nester.

The song of the Greenfinch is better than generally imagined, though differing in individuals, consisting as it does of only a few notes; but these are somewhat full and rich, though slightly marred by a few harsh notes that are occasionally interspersed.

Greenfinches feed upon almost all kinds of grain and seeds, especially dandelion, of which they are very fond, not even despising those growing by the country roadsides, where indeed they are generally plentiful; groundsel, chickweed, and sowthistle also help to swell the bill of fare, and in the spring-time the sweet young buds and the gardener's radish and cabbage seeds have to suffer. In winter, when all these dainties have disappeared, the Greenfinch makes shift with hips and haws, and will visit farm-yards and rick-yards and haystacks in search of food.

Towards the end of autumn Greenfinches congregate together, and when the migratory season is at hand appear in large flocks. But the bird is only partially migratory; and whilst many seek a more congenial climate, a very large number remain in England the whole of the winter.

[illegible]

[illegible]

During the winter these birds will often admit strangers of the same class into their flock, and many a stray Chaffinch or Linnet may be observed feeding with them. When alarmed, they all rise and hurry off to the nearest tree. A stray one amidst a flock of Linnets may always be so traced, as the Linnets remain in the open, while the Greenfinch rushes off to shelter.

The Greenfinch is, perhaps, the commonest of the Finch tribe, the Sparrow alone excepted, and is to be found throughout the whole of the cultivated portions of Great Britain, and is well known in Ireland. The length and breadth of Europe is laid under contribution, and along the Levant and in Asia Minor it is plentiful.

REDSTART

(7/8 NATURAL SIZE)

THE WHEATEAR

REDSTART

(NATURAL SIZE)

THE REDSTART.

Phœnicura ruticilla.
Sylvia phœnicurus.

ALTHOUGH one of the handsomest of English song birds, the Redstart is but little known by name, except to ornithologists—and this, too, in spite of the fact that it is not uncommon, especially in certain localities, where, however, when noticed, it is generally denominated by the name of "Firetail." This sobriquet is derived from the peculiar manner in which it shakes its tail, which is totally different from the steady up-and-down manner peculiar to the Wagtails and various "Chats." When disturbed, the Redstart does not fly far, unless danger be imminent, but contents itself with a short flight of from twenty to thirty yards, settling upon an outer branch; and there it calmly sits, and shakes its tail whilst reconnoitring. Many

persons, doubtless, when walking along a quiet roadside or near a coppice, may have noticed the peculiar tactics of this almost Orientally-coloured bird, and at the same time wondered as to its name and nationality.

The plumage of the Redstart is subject to variety, according to the season. That in summer is very striking: the beak is black, except at the corners, which are yellow, as is also the inside; from the base of the beak towards the eye, and the chin, throat, and upper part of the breast, it is black, the feathers being generally slightly edged with grey. The forehead is white; the wings are brown, the outer edges of the feathers rather lighter; the lower part of the breast, the sides, and rump are bright rusty red, the belly much lighter, shading below to rusty yellow; the neck and back are leaden-grey, slightly tinged with red; the tail is rusty red, with two brown feathers in the centre. In winter, the adult males, as also the young males of the year after their autumnal moult, are not possessed of the white forehead, the feathers being then edged with brown; the chin, throat, and breast are tipped with whitish-grey, and the upper part of the body becomes pale reddish-brown, tinged with the grey. The length of the Redstart is about $5\frac{1}{4}$ inches.

The female is much less handsome, and is also a trifle smaller, than the male. An uniform greyish-brown pervades the upper part; the chin and throat are dusky-white; the breast is dirty rust colour; the wings are lighter, but the tail is not quite so bright.

Its haunts are very varied in their nature, sometimes being a most retired and sequestered spot, or thickets and hedgerows, and again even near to dwelling-houses. The nest is placed in a hole in a tree or wall, or amongst the loose

stones of a fallen wall, or in a nook behind a tree growing against a house. This nest is loosely constructed of roots and grasses, with a few feathers and hairs. The eggs, which much resemble those of the Hedge Sparrow, though lighter, are apple-green in colour, and vary in number from five to seven.

The young birds, as soon as the wing and tail feathers attain any size, do not continue in the nest throughout the day, but may be seen perched upon the branches of a neighbouring bush or tree, whilst the parents are busily feeding them.

The food of the Redstart is almost entirely insectivorous, and consists chiefly of ants and their eggs, flies, moths, spiders, caterpillars, worms, and beetles. As with Flycatchers, they pursue flies and moths upon the wing as well as when feeding upon the ground. The young are fed upon a similar diet.

As before mentioned, these birds are migratory, and begin to arrive in this country about the beginning of April; and they are more generally to be observed, especially in the hedgerows, at this time, than when, later on, they are absorbed in the duties of incubation. They retire to the Continent in September, though isolated cases have happened when a bird has been observed later.

The song of the Redstart is very pretty, although composed of but few notes—indeed, somewhat similar to that of the Whitethroat; unlike that bird, however, its manner of delivery is very different, as the song is generally uttered whilst sitting upon a tree. It is continued, with intermissions, from morning until evening. Its call-notes are varied. Morris likens one to "chippoo," whilst McGillivray describes another as "oichit."

This bird may be kept in a cage or aviary, where its handsome appearance will immediately attract attention. Redstarts are, however, very delicate, and require artificial heat in winter, and will seldom thrive unless meat be given and a plentiful supply of meal-worms. They have been reported to have learnt to whistle a tune, Mr. Sweet mentioning one so gifted. They will, even in a state of nature, imitate the songs of other birds, such as the Robin, Lesser Whitethroat, Chaffinch, Garden Warbler, and even the chirping of the Sparrow; and were they more hardy and susceptible of aviary domestication, there is no doubt that their powers of song could be considerably developed, as in the case of the Canary.

TEAL
(3/7 NATURAL SIZE)

TEAL
(3/4 NATURAL SIZE)

THE TEAL.

Anas crecca.
Querquedula crecca.

ALTHOUGH the smallest of the true Duck tribe, this bird is very handsome, and very good eating withal.

In size it is from about fourteen to fifteen inches in length. The head and neck are chesnut, except that a very narrow band of light buff, starting at the base of the beak, extends over the eye to the back of the head; another band branches off from the front of the eye, and passing under, loses itself at the ear coverts. Between these two bands from around the eye, and extending towards the back of the head, is a broader band of glossy bluish-green, which reaches a short way down the back of the neck. The chin is black, the breast yellowish-white,

spotted with black and tinged with purple, the under part shading to dusky white, and barred—or rather, waved—with zigzag black and white lines; the back is also so barred, with a ground colour of pale grey, shaded with dark brown towards the tail. The wings are dark brown, very prettily barred with glossy green, white, and rufous brown. The tail is pale dusky brown, edged with white, except two middle feathers, which are grey, edged with buff. The female is not so handsome as the male, a brown patch taking the place of the green streak running from the eye to the back of the head. The green spangle upon the wing is also darker, being more deeply tinged with purple.

When the young are first hatched they are covered with a dark-coloured down; but in about two months they become like the female, the males not attaining their full plumage until the middle of the succeeding winter.

About the end of July or beginning of August the adult male assumes the duller plumage of the female.

This bird, which has been aptly termed the "little Wild Duck," may be found pretty generally throughout Europe, especially in Norway and Sweden, these latter countries being their most popular breeding-places. They are, however, plentiful in England, more especially in the winter months, when a considerable migration takes place from the Continent.

There are some, however, that breed in England, especially in low marshy districts, as they are more fond of inland waters than the sea-side. They may generally be found frequenting the edges of rivers, ponds, pools, lakes, or such-like pieces of water; also in marshy grounds, and

even small streams and ditches, more especially if they find there the protection of flags and rushes.

Their food consists of grain generally, especially barley and oats, which is first moistened before swallowing; they also feed upon duckweed and such-like plants, as well as grass, seeds, and water-insects.

The nest is usually built by the side of an inland lake, but may also be found in many other places, and even sometimes placed in clefts of rock or in stony places by the sea-shore. This nest is generally built of vegetable substances, such as heath and grasses, and is placed amongst the rushes that grow in moist and boggy localities. They line this structure thickly with down and feathers. The nest is large.

The eggs vary in number, but are generally about eleven, though they range from eight to fifteen. They are dirty-white, tinged with buff.

Teal are somewhat gregarious, although the males generally form small parties towards the close of autumn, before the young have left the females. They also generally travel in flocks, and, like all ducks, with their heads stretched out, and generally ranged in a triangle; their flight is strong and straight, and in the daytime is sustained at a considerable elevation. When they start their flight from the water they flap their wings upon it for some distance, until they are able to raise themselves above it. In alighting, also, they skim the water for some distance.

The indigenous birds remain in the district where they were born, and leave their resting-place soon after sunset in search of food. During the day, however, they will generally be found resting by the side of the water, beneath

the shelter of some flags or rushes, with their heads beneath the feathers of the shoulder. When in search of food, however, they are very nimble, and run lightly upon the boggy ground among the reeds and rushes. As is natural with an aquatic bird, the Teal has web feet, of a brownish-grey colour.

These birds are easily kept in confinement, and if in a suitable position they will breed freely, and will be a source of considerable interest, especially to the fortunate possessors of ornamental waters, where their habits of remaining attached to their birthplace will be an especial advantage. Many of our readers may call to mind instances of their presence upon the ornamental waters of our public and other parks, whilst the Teals at the Zoological Gardens, Regent's Park, have been especially successful.

NUTHATCH
(⅔ NATURAL SIZE)

THE NUTHATCH.

[illegible]

ALTHOUGH rarely if [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] allied to the [illegible] tribe, it has [illegible] very [illegible] habits, [illegible] and [illegible] different from those both, especially in its food and the manner of obtaining it, as also a peculiarity in [illegible] up the [illegible] to its nest. This bird received especial notice from the Rev. Gilbert White, he having mentioned it as many as four times in that charming work of his, the "History of Selborne." The first notice of it is in reference to the manner in which it [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

NUTHATCH
(NATURAL SIZE)

THE NUTHATCH.

Sitta Europæa.

ALTHOUGH pretty in plumage, still more is the Nuthatch interesting in its habits. Being very nearly allied to the Woodpecker tribe, it has also very many habits, tricks, and manners different from those birds, especially in its food and the manner of obtaining it, as also a peculiarity in plastering up the aperture to its nest. This bird received especial notice from the Rev. Gilbert White, he having mentioned it as many as four times in that enchanting work of his, the "History of Selborne." His first notice of it is in reference to the manner in which it obtains the kernel from out the nut. In that locality it was known as the "Jar Bird;" but it has also

the local names of "Woodcracker" and "Nutjobber," and (having reference to its nest) it is very frequently known as the "Mudstopper."

The whole of the upper part of the Nuthatch is of a pretty slate-grey colour; the throat, breast, and belly are buff, shading upon the flanks and under tail-coverts to chesnut; from the base of the beak, past the eye, and running to the back of the ear, is a streak of black, which, separating the grey of the upper part from the buff of the breast, gives character to its distinctive prettiness. The legs and claws are light brown. The foot has three toes in front and one behind, which are especially strong, as, in climbing, this bird does not use its tail as does the Woodpecker, which bird has also a different arrangement of its feet. The wings are short, as is also the tail, and both are rounded. The white edging of the feathers of the tail are very plainly discernible when the bird is flying.

The length of the Nuthatch is about six inches.

The male bird is considered handsomer than the female, although it will take an experienced eye to tell the difference; yet it will generally be found that the female has not such bright chesnut brown upon the flanks.

These birds generally associate in couples (which is one of the peculiarities, too, of the Woodpecker tribe), and are also somewhat "local" in their choice of a home. They usually affect woods, plantations, and parks, especially if the latter have fine old oak or other forest trees; yet it cannot be said that the Nuthatch is a scarce bird.

Their food is principally composed of nuts, but they also eat corn and grain, acorns and beech-nuts, whilst (possibly as a corrective to so much vegetable food) they will at times feed upon beetles, caterpillars, and other

insects and their larvæ. The manner in which they obtain the kernel of the nut is very interesting. When a nut has been obtained, it is placed in a crevice of the bark of a tree, or in a crack or slit of a paling or gate-post, and by continuous knockings with its hard bill, by dint of perseverance the most stubborn shell is at length broken and the contents extracted. They, like squirrels, often lay up a stock of nuts for a possible "rainy day;" and if nuts be placed in suitable positions near their haunts, Nuthatches will often find them out, break the shells, and eat them. It is during this operation that they make the peculiar rapping noise that has so often attracted attention. The stroke of their bills against the hard shell of the nut can be heard upwards of two hundred yards away.

The nest of the Nuthatch is placed in a hole in a tree or old stump, and even at times in a hay-rick. The nest is not very artistic; but if the hole by which it is approached be too large, these birds will, with most exemplary patience, build it up with mud or clay, after the manner of House Martens, until they leave just sufficient room for the purpose of ingress and egress. The nest proper is built of dry leaves, moss, bits of bark and wood, and sometimes a few dry bents of grass. The eggs vary in number from five to nine, and are of an oval form, greyish-white in colour, but spotted, and even at times much blotched, with reddish-brown. The young resemble their parents, but are not so handsome.

The song of the Nuthatch is but slight, yet plaintive, and only to be heard during breeding-time; its call-note, which is often repeated, resembles the phrase "Whit-whit-whit."

Although undulating, the flight of these birds, possibly

in consequence of the formation of the wings and tail, is somewhat heavy; and they seldom will be found to take a more extended flight than from tree to tree.

There is scarcely an aviary more interesting than one containing a Nuthatch, some Tits, and a Woodpecker. By their unflagging motions—now creeping up, now crawling down, the sides of the aviary—by their peculiar manner of taking their food, and by their interesting vivacity, especially in the matter of stealing the nuts that the Nuthatch has cracked, these birds will repay any one who may be fond of bird pets.

BLACKBIRD
(1/3 NATURAL SIZE)

THE BLACKBIRD.

Turdus merula.

KNOWN in various parts of the country by the names of "Merle" and "Ousel" (although now somewhat obsolete), the Blackbird was thus concisely described by Shakspeare, *i.e.*—

"The woosel cock so black of hue,
With orange tawny bill."

The plumage of the male Blackbird is of an uniform deep black, not radiant, as in the Raven, although it is certainly a little more brilliant in spring-time. The beak of the adult bird is of a rich yellow; the eyelids, too, are of the same hue. The plumage of the female is blackish-brown, lighter upon the throat and breast, which latter is tinged with rust colour, and the beak is much duller, becoming partially yellow in the breeding season.

BLACKBIRD
(NATURAL SIZE)

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Turdus merula.

KNOWN in various parts of the country by the names of "Merle" and "Ousel" (although now somewhat obsolete), the Blackbird was thus concisely described by Shakspeare, *i.e.*—

"The wood-cock so black of hue,
With orange tawny bill."

The plumage of the male Blackbird is of an uniform deep black, not radiant, as in the Raven, although it is certainly a little more brilliant in spring-time. The beak of the adult bird is of a rich yellow; the eyelids, too, are of the same hue. The plumage of the female is blackish-brown, lighter upon the throat and breast, which latter is tinged with rust colour, and the beak is much duller, becoming partially yellow in the breeding season.

This bird is known almost as well as the Thrush, its sombre plumage and yellow beak possibly attracting the attention of observers. If disturbed, it has a peculiar habit, much more marked than in the Thrush, of lying close in the hedgerow or other cover; but immediately the danger has passed will rise suddenly, uttering a frightened sort of screaming clatter, and hurry off with a low flight to some more safe retreat. The general flight of the bird is, however, somewhat heavy and low, but at the migratory period is sustained at a considerable height.

Our subject is not a gregarious bird, seldom more than a pair being seen in close proximity; indeed, it is the rule for them to keep separate. They generally frequent hedgerows, copses, thickets, and furze, but may be often found in thick shrubberies, and also in gardens. It is in various positions, too, that they build their nests; sometimes it will be placed in a garden or in a tree at some height from the ground, yet it is generally found in a hedgerow, especially if bordering upon a copse or wood; they will even breed upon the stump of a tree or upon the ground. Large faggot-stacks, too, are often chosen. They will at times build near to dwelling-places, and, as there is at such season but little vegetation, the nest is consequently much exposed.

The nest is built early in the spring, and is formed of an outer shell of coarse roots and grasses, with the mud still adhering, and as this dries it forms a strong foundation; it is lined inside with finer grasses and roots. The eggs are four or five in number.

Very many instances have been recorded of the devotion of Blackbirds to their young, sometimes even cats

having been successfully assailed. The parents are very attentive to their offspring, and feed them with exemplary patience.

The plumage of the young whilst in the nest shows almost as much difference as that of the parents. They are blackish-brown on the upper parts, each feather being streaked with reddish-brown in the centre, the male being darker than the female; the under parts are a light reddish-brown tipped with dark spots, which are clearer in the males; the males, too, having blackish-brown wings and tail, whilst the female's are of a lighter brown. The young do not obtain the rich yellow beak until the succeeding spring; before then it is brown. The female's beak may possibly become a brighter yellow with age, and it may be that the same will happen if she be kept in a cage.

The food of the Blackbird consists chiefly of worms, slugs, caterpillars, beetles, or any such-like insects. It is therefore a great help to the gardener and husbandman, but it is also very fond of fruit, and will create great havoc amongst currants, cherries, strawberries, gooseberries, and even apples. The blackberry, too, furnishes the Blackbird with many a meal, and in winter they will also feed upon hawthorn berries. The young are fed upon a very similar diet to that of the parent birds.

The song of the Blackbird is somewhat similar to that of the Thrush, not in tone so much as in style and execution; though the Blackbird's is not so brilliant or persistent, yet it is possessed of some full, flute-like notes that almost rival the tones of the nightingale. This beautiful song is generally delivered in the morning and evening, although it may be heard throughout the daytime.

A shower seems to have an effectual influence upon the song, inasmuch as it is then that generally the most beautiful notes may be heard pealing forth in the summer twilight.

Although this bird continues in England the whole of the year, it is still partially migratory, many of them arriving in the South whenever the snow has deprived them of the means of living in the North.

The Blackbird may be kept in a cage, which should be of willow-work, and large; when with attention—which he will amply reward with his splendid song—he will do well, except for being apt to break his feathers. It is not quite advisable to place him in an aviary, as he possesses a domineering disposition, and being a large bird—its length being about ten inches—it may become dangerous to the smaller birds, besides eating more than its share of food.

GREAT TIT
(3/4 NATURAL SIZE)

[illegible] of its tribe, this bird is [illegible] very interesting. [illegible] common [illegible] it [illegible], [illegible] it [illegible] wooded [illegible] it is very apt to [illegible] the [illegible] of casual observers. [illegible], however, [illegible] appearance [illegible] tablets of [illegible] attention. The plumage of the adult male especially is very striking, the top of the head being purple-black, the cheeks and ear-coverts white, the back, shoulders, and most of the upper part greenish ash-colour, the wings bluish-black edged with white, especially the lesser wing-coverts, which latter form a bar; the tail is also bluish-black; the chin and throat are black, which colour [illegible] with [illegible] the back of the head,

GREAT TIT
(Natural size)

THE GREAT TIT.

Parus major.

LARGEST of its tribe, this bird is both handsome and interesting. Though much more common than is supposed, since it generally frequents wooded districts, it is very apt to escape the eyes of casual observers. When seen, however, its very handsome appearance and sprightly habits at once attract attention. The plumage of the adult male especially is very striking, the top of the head being purple-black, the cheeks and ear-coverts white, the back, shoulders, and most of the upper part greenish ash-colour, the wings bluish-black edged with white, especially the lesser wing-coverts, which latter form a bar; the tail is also bluish-black; the chin and throat are black, which colour unites with that upon the back of the head,

and runs down the chest along the breast-bone to the under parts; on either side the breast and flanks are dull sulphur-yellow. The female is not so handsome, and the bluish tint upon the head is not so bright, which also applies to general plumage.

This species has an intermediate beak between the finches and warblers, being strong, short, sharp-pointed, and hard. They are therefore able to feed very variously, although they are more truly insectivorous, and may be seen searching the leaves of trees in quest of insects or their eggs, and will run up and along branches, capturing those insects that have taken refuge in the bark. In their search they are most indefatigable, hanging to the leaves and branches, calling to one another meanwhile; for although not extremely gregarious, they generally feed in parties of seven or eight, and will often visit hedgerows and gardens, orchards and thickets. In winter, too, they visit towns, and may then be often heard uttering their querulous little call. These birds, however, do not disdain to feed upon all kinds of grain, and will even steal the Indian corn thrown down in the woods by the gamekeepers for pheasants. They hold their food in their feet, and break it up by repeated blows of their hard, sharp beak. Some have been observed to visit beehives, and tap at the hive until a bee comes out and is captured; the bird then flies off, possibly for fear of the indignation of the rest of the hive, to some neighbouring tree or shrub, where it may be seen quietly eating it whilst holding the carcase in the claw. This manœuvre will be repeated many times, to the dismay of the owners.

The bird is also known as the Titmouse, and again as the Oxeye, and generally builds its nest in a hole in a tree

or wall, although very erratic in its choice, instances having occurred of their building in a water-can or some such receptacle that is capable of being removed. The nest, which is built somewhat early in spring, is formed of moss, lined with hair and feathers, and, in the case of a large cavity being selected, a great mass of materials are gathered together. The eggs vary greatly in number, usually from six to nine; they are white in colour, but are largely spotted and speckled with pale red. As there is generally a large nest of young, extra food must necessarily be found by the parent birds, and since this consists mostly of insects, the Great Tit, at such times especially, is of great service to the gardener and farmer. The plumage of the young is somewhat similar to that of the parents, but duller in colour.

The flight is much stronger than would be imagined, although they seldom put it to the test, being bold birds, and, if disturbed, generally contenting themselves with flying from tree to tree. That is also their usual mode of progression, each tree being in their course diligently searched for insects, &c.

The song of the Great Tit is not unlike that of the Wryneck, but is most nearly represented by the phrase "pinker, pinker," several times repeated in a clear, pealing tone. This song is uttered again and again as the bird proceeds from tree to tree, and is repeated by its comrades in answer. They may be heard very early in the spring, long before the leaves are upon the trees.

As before mentioned, this bird is common in almost all the wooded and inclosed districts of England and Wales, as also Ireland and Scotland. The whole of Europe is its habitat, and it will even be found in the extreme North.

The Great Tit is very fond of fat or suet, and ingenious people may often derive considerable amusement by hanging some to the bough of a tree, especially in winter, when the birds frequent towns; for the Tits will clutch the suet with their feet, and, if given string enough, will swing around after the manner of a roasting-jack. These visits will be repeated day after day, becoming in time a regular institution.

If required for the aviary it is much better to get the birds from the nest and rear them by hand, as they may then become more sociable; but if taken when adult they are very often apt to become dangerous, and will even attack birds much larger than themselves, and, by repeated blows of their sharp little beaks, break open their victims' heads and eat their brains. If, however, a separate cage or, better still, a small aviary be available, Titmice will amply repay the trouble of keeping, being very handsome, and especially lively and interesting.

SEA GULL
(½ NATURAL SIZE)

SEA GULL
(NATURAL SIZE)

THE COMMON GULL.

Larus canus.

ALTHOUGH termed the "Common" Gull, this species is not more common than the Herring and Blackheaded Gulls, and may have been by many associated with those birds in the common appellation "Gull."

Gulls are amongst the prettiest adjuncts to a sea-side watering-place; yet many thoughtless visitors will make so-called sport in the wilful shooting of these handsome birds. But to see them flying around, or skimming the water whilst in pursuit of food, uttering their squealing cry to one another meanwhile, with possibly a shoal of fish beneath and a lovely sky above, is one of the most interesting sights to be seen at the "sea-side."

Their flight is heavy, yet

capable of very considerable extension, as these birds fly many miles whilst in pursuit of their food. This they take in an ingenious manner, almost settling upon the water in order to secure it.

When resting after a long flight, or under any other circumstances, they will sleep upon the water. Whilst swimming they seem to place ordinary waves and breakers at defiance, and though seemingly unconcerned, manage at such times to ride or fly over them.

The Common Gull frequents the whole of the coast of the British Isles, and may be found, together with the other Gulls, upon the coast of Cornwall, around Portland Bill, Beachy Head, and the other cliffs of the south coast, off Mersey Island, in Essex, around the east coast to the "Bass" Rock, along the shores of Pentland, and, indeed, more or less throughout the coasts.

But these Gulls, unlike many of their tribe,will also be found inland. They will even follow the plough, in quest of the worms and grubs turned up by it. They will also follow the course of rivers for many miles. Sometimes a flock of them may be seen in meadows or grass lands after the manner of rooks, the rear ones flying over the rest of the flock as the ground becomes thoroughly searched, until they work from one end of the field to the other. Their beautiful grey and white plumage at such times forms a remarkable contrast to the green grass, and is altogether an interesting and beautiful sight.

These birds are gregarious, living generally in such localities as afford convenient feeding-grounds and nesting-places. These latter, however, are very erratic, as they are sometimes situated in chalk and other cliffs or rocks, and again upon flat marshy grounds. The nest is built chiefly

of sticks, seaweed, and grass, and is a somewhat large one, in comparison with the size of the bird. The eggs are but two or three in number, of a dark olive-brown, blotched and spotted with black and darker brown.

The young differ materially from the aged birds, the plumage altering with age. The head and neck of the bird of the year is dull white, mottled with greyish-brown; the wings and back are brownish-ash colour, mottled by the feathers being edged with a paler brown, whilst a few bluish-grey feathers may sometimes be found upon the back; the longer feathers of the wing are brown; the tail is white, the feathers having the outer half brown; the chin and throat are white; the breast and under parts are also white, much mottled with light ash-brown. At this period they are often termed "Grey Gulls." By successive moultings, however, this plumage materially alters, the bird depicted in the plate being a partially-moulted one, showing some of the young feathers upon the shoulders, which would, however, vanish with age, until the plumage of the bird becomes a beautiful bluish-grey and white. In winter, however, the head and the sides of the neck, which are white in summer, become spotted with dusky ash-brown. In consequence of these many varieties of plumage, Common Gulls are somewhat like the coffee-plant, and may be seen at the same season in all these various featherings, for they generally feed together, their call-note (which sounds like "squeel") being the signal for them to gather, and generally to fight over the possession of any food that attracts them. Their food is principally fish and offal, or any garbage that may be found floating upon the sea. When they fly inland, which is often at a considerable height, their food is generally worms, grubs, and slugs,

and they will even feed upon grain, some that were kept with clipped wings having been induced to feed mainly upon it. When upon the marshy inland districts, however, worms and slugs are their most general food.

Their flight, though strong and capable of being sustained for an immense distance, is dull and heavy, except when they swoop down upon some object of food upon the water; their wings, however, are exceptionally long, in comparison to the size of their bodies.

If kept with clipped wings and allowed the freedom of the lawn and garden, a Gull is a "thing of beauty" which would always be attractive, and being so easily fed will not occasion any trouble; besides which, they will also become very tame.

GREEN WOODPECKER

(1/2 NATURAL SIZE)

THE GREEN WOODPECKER.

Picus viridis.

LARGEST of the tribe, this bird is also extremely handsome, the British birds being able to avoid the gorgeous colour of the plumage. Although green is the prevailing tint, yet that colour shades off to yellow towards the upper part of the tail. Upon the top of the head is a brilliant crimson, the feathers being black, tipped with red, forming a slight prevailing. These feathers sometimes assume the form of a partial crest. From the base of the beak to the back of the eye is black, and down each side of the throat, forming a kind of moustache, runs a crimson streak, bordered with black. The outer wing-feathers are barred with greyish-black and squares of buff. The hen may be distinguished from the male by the fact that she does not possess the crimson

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moustache. The ordinary length of the bird is about thirteen inches. It naturally prefers parks and old timbered woods, as such places afford the most plentiful supply of food.

It is known by a variety of names, most of which, however, are entirely local. Amongst others, it is perhaps most generally known as the Popinjay and Awl Bird; yet it is also known by the names of "Rain" bird and "Tongue" bird, whilst in the south it is commonly termed the "Yaffle," or "Gally" bird. It is found throughout England, and also upon the Continent.

The flight of the Woodpecker is undulating, and yet somewhat heavy; usually only extended from tree to tree. It will alight at the base and ascend the trunk spirally, clinging with its feet to the bark, and supporting itself with its tail, searching the bark and leaves for insects meanwhile. The descent of the tree is accomplished in a backward manner. The tail, which is especially strong and wiry, is used both in the ascent and descent.

In order to obtain the insects secreted in the crevices of the bark, the Woodpecker is provided with a most wonderful tongue, some inches in length, very prehensile, of a silvery appearance. When in search of food, this organ is protruded with marvellous celerity, and, being covered with a glutinous substance, it invariably secures the object aimed at; it is then as quickly withdrawn, with the food adhering.

The beak is wedge-shaped, long and strong, and used by the bird to tap at the bark in order to induce the insects to emerge from their retreat. The eye is clear and white.

The Woodpecker can hardly be said to build a nest, and yet it takes an immense amount of trouble in preparing a site wherein to deposit the eggs. This is in a hole made by the birds by continuous chipping with their beaks in an old tree, and the chips of wood broken off by the birds in the operation are said to be carried some distance, in order that the hole may escape detection. The entrance is small, but a larger cavity is scooped out in the tree, and upon some of the dry chips of wood the eggs are deposited. These are usually from five to six in number, pure white in colour, and so transparent that the yolk is visible.

The young are fed upon the same insect food as the adults. They will leave the nest before they can fly, and run upon the branches of the tree.

The young are not so brilliantly arrayed as the adult birds, and the crimson of the moustache and upon the head is much fainter. The black, too, is marred by feathers tinged with greyish-white, whilst the breast from the chin is much lighter, and the green generally not so bright; the plumage having somewhat of a speckled appearance.

The Green Woodpecker can be found in England throughout the year, generally singly or in pairs; for it is strictly non-gregarious, and pursues its avocation in a quiet manner, except for the noise made by the beak tapping upon the bark. Yet, as many of our readers may remember, the Woodpecker is possessed of one of the most peculiar songs to be found; indeed, it is generally spoken of as a "laugh," and is very variously interpreted. Morris speaks of it as "glou, glou, glou, gluck!" but to our ears it sounds more like "yaffa, yaffa, yaffle!" which

may account for its southern name of "Yaffle." This song is uttered in an abrupt manner, and, when heard in the quiet seclusion of a park, surrounded by noble old "monarchs of the wood," it has a peculiarly startling effect.

The feet of the Woodpecker are especially adapted for climbing; they are strong, dark-coloured, and the toes are roughened beneath, whilst the claws are strong and much hooked. The arrangement of the toes is also peculiar, as there are two in front and two behind.

If obtained when young, this bird will live well in an aviary or large cage. It is perhaps not advisable to place it in an ordinary aviary, as its size and habits may frighten the smaller birds. If a separate one, or one inhabited by Tits or a Nuthatch, be available, the peculiar habits, song or "laugh," and the peculiar tongue—which has the appearance of a streak of white silk or molten silver—of the Woodpecker, will amply repay all trouble.

KINGFISHER
(3/5 NATURAL SIZE)

THE KINGFISHER.

Alcedo ispida.

WITHOUT doubt this is the most brilliantly beautiful of all British birds; in fact, it can vie in the brilliancy of its plumage with most of the much-admired, highly-coloured, but generally songless foreign birds. It seems to be a peculiarity of the bird-world that the song deteriorates in proportion to the beauty of the plumage; for although the Kingfisher is our most orientally-coloured bird, its song is nothing to speak of.

Yet those who have seen it skimming the river, flying along like a streak of coloured light, under the archways of rivers and streams, with a rapid, straight flight, can well understand the reason of its being classified among the "Halcyonidæ."

Many have been the notices from poets of this beautifully-plumaged bird, Shakespeare having many references to the "Halcyon"; more especially as these birds were not only imagined to be able to determine the weather, but in case of storm or tempest were supposed to have a quelling influence over them. We are afraid it is *vice versâ*, and that (as with King Canute) the flooded river would not heed the Kingfisher, but would, doubtless, wreck the Kingfisher's nest.

The length of the Kingfisher is about seven inches. The plumage may be thus described: From the crown of the head, down the neck, and the whole of the upper part, the wings, and tail, are of a brilliant green, shading from olive to iridescent emerald and blue; from the beak across the eye is a patch of rufous, which becomes white below the ear-coverts; from the base of the beak runs a streak of the above-mentioned glossy green, which meets that upon the wing-coverts. The chin and throat are yellowish-white; the breast and under parts are rufous, deepening in colour as it proceeds towards the tail. The feet are pink and small. The tail is short; but the beak is long and straight. The plumage is much brighter during the breeding season. The female may be distinguished by her duller hues, and from the bill not being so long.

The nest has always been a source of wonder to ornithologists. It is generally placed in some hole in a bank overhanging a stream, but sometimes placed away from water; a favourite position is a hole in the bank of some river or stream which has been undermined by the action of the waters, and so affording a somewhat safer retreat from the depredations of the rats that frequent such places. The nest, too, is very peculiar. It would appear to be

composed of the bones of the fish captured by the birds. Some naturalists have said that these bones are "cast" up by the birds, and that the nest is made upon this accumulation. It is generally well hidden, and, except for the rats, the Kingfisher, being so beautiful, need fear few foes; it was, however, a favourite "sport" of some possessed of a gun, some years ago, to kill these beautiful birds; and as they fly straight they are easily marked. Yet there are few things more interesting than to watch one of them whilst fishing. Many an Oxford man has seen these birds along the Cherwell, skimming the water under Magdalen Bridge, or, having drifted noiselessly in his boat with the stream, has seen them seated upon an overhanging bough, watching the water with anxious eye until the long-wished-for prey appears. The Kingfisher then darts down, even swifter than a gull, secures its prey, and by its buoyancy regains the use of its wings, and flies off with the prize to its nest, if it be possessed of one, otherwise returning to its "post of vantage."

The general abode of the Kingfisher is near rivers, lakes, streams, brooks, ponds, and ditches, or indeed wherever food may be found. This food consists principally of small fish, such as minnows, sticklebacks, or any such-like smaller species of fish, water-beetles, and leeches. These are taken with the beak; and the object aimed at is seldom missed.

They are very pugnacious, and, consequently, lead a solitary life. Their pugnacity may be one of the reasons of their partial migration, which takes place often from one district to another; want of food, however, is doubtless the prime reason, more particularly in winter, when they have to find an unfrozen stream. They will, however, during frosts

frequent the mouths of rivers, and even as far as to the sea shore.

The eggs of the Kingfisher are pure white, and generally from five to six in number. The plumage of the young is similar to that of the adult birds, but, of course, not so bright.

The call is but a shrill pipe, or squeal.

Kingfishers may be kept in an aviary, provided proper food is given, putting birds caught young at first upon small fish, and gradually substituting fresh beef chopped small and hard-boiled egg. It is not advisable to have more than a proper pair, on account of their very pugnacious habits. It is needless to say that if a little water be introduced into the aviary, and small fish be given, it is possible to make the Kingfisher one of the most beautiful and interesting of the inhabitants.

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MOORHEN
(3/7 NATURAL SIZE)

[illegible] in many localities, [illegible] or considerable [illegible], and is generally well [illegible] throughout England. [illegible] in many localities [illegible], and has also [illegible] local names that [illegible].

Although dubbed "Moor"-hen, these birds will be more generally found frequenting the sides of rivers, streams, lakes, ponds, and such moats or ditches as supply food, or the protection of rushes, reeds, or sedge, and again even osiers and brushwood. Therefore it is that these birds [illegible] alone rivers, or [illegible] they may be discovered up by "[illegible]" or locked, and where reeds and rushes abound.

It is extremely interesting to watch the facility with

THE MOOR, OR WATER HEN.

Gallinula chloropus.
Fulica ,,

THIS bird is, in certain localities, to be found in considerable numbers, and is generally well known throughout England. It is known in many localities as the Water Hen, and has also some other local names that are now obsolete.

Although dubbed "Moor"-hen, these birds will be more generally found frequenting the sides of rivers, streams, lakes, ponds, and such moats or ditches as supply food, or the protection of rushes, reeds, or sedge, and again even osiers and brushwood. Therefore it is that these birds prefer slow rivers, or those that may be dammed up by "lashers" or locked, and where reeds and rushes abound.

It is extremely interesting to watch the facility with

which it will thread its way between the flags and rushes that grow upon the sides of the waters, or through those banks of rushes that may be found growing in some "still" rivers and streams.

Yet the Moor-hen is not web-footed. It can, however, swim and dive with the utmost celerity. If disturbed, it will at times dive beneath the water, and there continue for some considerable time, rising in an unexpected position for the purpose of breathing, when only the beak and head are exposed.

Its flight is usually low, and when alighting upon the water it skims it with its legs for some considerable distance, leaving a streak of bubbles upon the otherwise undisturbed surface. The same circumstance in a much lesser degree occurs when taking to flight from the water.

It is not a shy bird, and will often live in close proximity to the usual haunts of men; even the terror of a railway train fails to drive it from the ponds and streams that skirt the line. When a number are disturbed, they do not all take to flight in a flock, but one will first leave the rushes, then another or perhaps two, and so in a disconnected series they will fly to a safe retreat.

The plumage of the Moor-hen, when seen skimming the water, appears to be black and white; but upon closer inspection many more hues are apparent. The beak or bill is dark greenish-yellow, but bright red at the base, which colour runs up the forehead; and both are brighter in spring-time. The head, neck, and breast are deep blackish purple-gray, with a slight slate-gray tinge upon the throat and breast; the under part has the feathers margined with dull grayish-white; beneath the wings the feathers are streaked with white (in spring slightly glossed with

green); the back is very dark brown, approaching to black, but bearing (especially in spring) a tinge of olive. The tail is short and rounded; the under tail-coverts are white, which, with a few white feathers upon the wings, and sometimes upon the thighs, are very perceptible when the bird takes flight. There is little difference in the female's plumage, except that she has not so much red upon the bill.

The legs of these birds are green, with a sort of red garter above their knees, which is less bright in the female. The young are clothed in a black down, and their plumage at first appears almost black.

The food of these birds consists of certain food that may be found upon or near the waters they frequent. They may be often seen swimming along, feeding, with a nodding motion of the head, first on one side and then on the other, upon the vegetable substances floating upon the water, though their general food is aquatic plants and small fishes, or insects, worms, and slugs, for which latter they will leave the river and search the neighbouring meadows.

Although somewhat loudly uttered, the only note possessed by the bird is a sort of chirping cry, or rather "call note." That of the young, also, sounds like a chirp, or may be described as "chip-chip."

Moor-hens build their nests generally amid the flags, reeds, and rushes that border their rivers, streams, &c.; yet they will build upon the banks, and again—suspended upon the reeds at very various heights—a large nest, loosely constructed of reeds, flags, and smaller reeds and grasses, and built in a flat, open manner, so that it is almost possible from a high overhanging bank to see its contents; yet a Moor-hen can seldom be found sitting upon her nest, as she

seems to slip off noiselessly into the water, and probably dives until danger is past. Many anecdotes are related of their ingenuity in escaping a rising of the waters if they should have built their nest too close to the water's edge.

There are usually about seven or eight eggs, of a reddish-white colour, spotted and speckled thinly with orange brown. Incubation lasts about three weeks.

The young leave the nest as soon as hatched.

Moor-hens have a sort of partial, or rather local, migration, which would appear to be caused by the necessity of their food, or because of their desire for open water. They are somewhat gregarious, a suitable abode naturally attracting many birds; but they will not be seen in flocks.

Their natural fearlessness makes them quite at home in a suitable aviary, where they will become very tame.

NIGHTINGALE
(2/3 NATURAL SIZE)

THE NIGHTINGALE

A.

[illegible] answers [illegible] the power [illegible] sweet [illegible] the [illegible] song of [illegible] deeply [illegible] never forgotten, be it the plaintive long-drawn-out "Wheet, wheet, wheet!" or the mellow "Jug,

NIGHTINGALE
(Philomela luscinia)

THE NIGHTINGALE.

Sylvia luscinia.
Motacilla „
Philomela „

NO bird has had so many tributes paid to it, both by poets and prose writers, as this altogether-unequalled songster. Its voice is unrivalled. The Blackcap, Lark, Blackbird, Thrush, and Robin, all fail to approach this "Queen of Song."

Yet few who have read of the wonderful power of voice that belongs to the Nightingales may have had the exquisite pleasure of hearing one of their delicious vocal contests; for it is when, in a still June night, Nightingale answers to Nightingale, and all the power of their combination of sweet sounds is put forth, that the entrancing influence of the song of the Nightingale is most deeply felt. Once heard, it is never forgotten, be it the plaintive long-drawn-out "Wheet, wheet, wheet!" or the mellow "Jug,

jug, jug!" or any of the other numerous and not-to-be-described phrases contained in the repertory of this beautiful singer.

Although possessing so sweet a voice, the plumage of the Nightingale is very plain, although its form is graceful. The whole upper part of the bird is rich chestnut-brown, slightly brighter upon the wings; the tail, which is rather long and rounded, is of a reddish-brown; the breast is dull whitish-grey, somewhat tinged with brown; the throat and under part are pale whitish-grey.

The female is with difficulty distinguished from the male, although she may possibly be smaller, and her eye not quite so large and bold. Some say that her throat is lighter.

The young birds are clad in somewhat similar plumage to young Robins, inasmuch as the brown is lighter than that of the adult birds, and the feathers being tipped with buff they have a mottled appearance.

The Nightingale arrives in England about the early part of April, the males preceding the females by about a week, or, at times, even a fortnight. As a rule they fly to their old retreats, although at times they will desert them, even for years, and then return again in augmented numbers. At this time the males continually sing, possibly with the intention of attracting a mate.

The usual haunts of the Nightingale are groves, small shady copses, plantations, woods, quiet gardens, and thick hedgerows, especially where a little thicket has been allowed to grow; and from these retreats, more particularly whilst building the nest, the beautiful song of the Nightingale is delivered both by day and night.

The nest is placed in a hollow of the ground, or in the

roots or stump of a tree, or towards the bottom of a hedge-row. It is built of various materials, including leaves, dry grass-stalks, and bits of bark and fibrous roots, loosely constructed, but lined with finer grasses and horse-hair.

The eggs are generally five in number, and of an olive-green colour.

The food of the Nightingale is almost entirely insectivorous, as it comprises such insects as caterpillars, beetles, moths and flies, small worms, and the larvæ of ants. Some birds also eat fruit, such as elderberries and currants.

The food of the young whilst in the nest is principally composed of small green caterpillars and worms.

Although Nightingales affect certain districts, where many pairs may be found, they notwithstanding keep almost strictly in pairs; and if by chance they meet, they will invariably fight, after the manner of Robins. Even the spirit of their song is at times uttered as if in a tone of acute rivalry, though as a rule it is one impassioned love-story, poured out on behalf of the mate who is so patiently attending to the duties of incubation.

Before leaving England, which happens in July and August, both the young and adult birds moult, but the young ones only partially, as they retain their wing and tail feathers. The song, too, of the adult bird ceases in a great degree some time in June, as soon as the nesting operations are over; yet these latter are often delayed if the first nest is taken or destroyed. The call-note of the bird is varied, sometimes being "Purr, purr!" and again a sort of "Wheet!" uttered somewhat sharply.

The flight is somewhat short, though also capable of much further extension; and is generally from bush to bush, as these birds seldom stray from their usual haunts.

The migration is usually at night, which peculiarity may account in a great degree for their nocturnal singing, especially as the males would thereby attract the later-arriving females.

Some naturalists have gone so far as to imagine that the day-singers were distinct from the nocturnal ones, and others that the parent birds took turns in sitting upon the eggs, and that it was the female whose voice so enchanted their ears in the stillness of evening; but both these ideas are now exploded.

With care and a sufficiency of proper food a Nightingale may be kept in an aviary, but better still in a proper cage. They are very delicate, and will require some artificial heat during winter.

LAPWING

(1/3 NATURAL SIZE)

THE LAPWING.

Vanellus cristatus.
Tringa vanellus.

KNOWN by the name of Peewit in many parts of the country (possibly from its cry), and again as the Green Plover, or, from its crest, as the Crested Lapwing, this bird is known undoubtedly to most people from the fact that its eggs are a favourite delicacy with *gourmets*.

The Lapwing itself is also a very nice-eating bird; and from these two facts it is to be imagined that the Plover has what the Americans would call "a bad time."

They have, however, also established a name that is not unrivalled by the Partridge or the Dove, in respect of the devotion that they show to their nest or young. When disturbed upon the nest, the parent bird runs a considerable

nce before it rises, with the intention of leading the ruder from the proximity of its nest. They then fly und, uttering their cry of "peewit," watching if mistune happen to their nest. From this reason it is somenat more easy to discover their nesting-place, if people ve watched their habits minutely. They will also feign be wounded, and will flutter along as if with a broken ing.

The young run directly they are hatched, but upon the proach of danger will squat still until the parent bird s lured the intruder away.

The flight of the Lapwing may have given rise to its me, as they fly heavily, though at times at a considerable ght, and with a dull, heavy flapping of the wings.

The Lapwing is a common bird, and may be generally ound to frequent open places, such as heaths, commons, marshy grounds, and fallow lands, sometimes affecting those that have been drained, frequenting the sides of the drains, in search possibly of food, and also the fields that have been undrained and neglected.

In consequence of the demand for Plovers' eggs, the fields and places that they frequent are hunted over, as it were, by those engaged in the trade, the eggs collected and forwarded to their destination, in spite of the efforts of the birds to lure the intruders from detection of their nests.

The nest is generally but a small structure, made of a few bits of grass, heath, or rushes; and at times no nest is attempted, but the eggs are laid in a slight depression of the ground, either upon a heath or common or in fallow land.

The eggs are usually four in number, of a deep olive-green colour, blotted and spotted in an irregular manner

with dark brownish-black. They are reported to be placed closely in the nest, with the narrow ends pointing inwards.

As before mentioned, the young will run as soon as hatched, and are covered with down, which makes them appear very pretty, but they cannot fly until they are fully grown. The adult birds are really very handsome, as may be imagined from the plate. The feathers upon the head are black, glossed with green, and considerably elongated, so as to form a very pretty upward-turned crest. From the beak to the eye, and passing over it, is a streak of white, sometimes spotted with black or brown; down the throat and upon the breast glossy black; and a streak of the same colour runs from the base of the beak under the eye to the nape of the neck; the back and wings are olive-green, the latter being shaded with brown and purple; the sides and back of the neck are white, shaded with buff; the under parts are white, deepening to pale brown towards the tail. This latter is white, deeply tipped with black.

The female very much resembles the male, but the crest (which is formed of six or seven feathers having an upward tendency) is not so long, and she is not quite so brilliant in her plumage as her mate; the black band, too, across the face—from the base of the beak, and under the eye to the back of the head—is much duller, and, indeed, may be termed deep brown. The young very much resemble the female, but are not so handsome, and also have a shorter crest.

As may be imagined from the districts it frequents, the food of the Lapwing consists principally of worms, slugs, and such other insects as it may find in marshy or fallow lands; but it also eats grain and seeds. They very often feed at night, when the worms quit their holes

—generally upon clear nights, or during "evening's twilight."

When storms occur, or under certain other circumstances, climatic or otherwise, they will assemble in flocks, wheeling around, uttering their wailing cry of "peewit, peewit." They also collect in large flocks in the autumn.

They can hardly be called migratory birds, although they often make considerable changes in the localities they affect. This may be for reasons of food. They, however, spread over the country in the succeeding spring, and perform their duties of incubation as already described.

The Lapwing may be kept easily in a garden or enclosure; and in the former it is really of great service, as it will destroy the worms and slugs, or such-like insects, that infest gardens; and, besides, they are somewhat of an ornament, as they are handsome birds. Of course, it is needless to say that they must have their wings clipped.

THE BARN OWL.

Strix Flammea.

A PROMINENT position in popular superstition has been held by this bird from time immemorial; for the "White," or, as it is more generally termed, the "Barn," Owl, is possessed of a peculiar *screech*, which, being uttered at night, has a particularly weird sound, and was held, in country districts more especially, to be a certain indication of an approaching death in the family. This peculiar note has earned for this bird the name of the "Screech Owl."

Keats mentions this bird thus:—

"St. Agnes' Eve! ah! bitter chill it was;
The Owl, for all his feathers, was acold;
The hare limp'd trembling through the frozen grass,
And silent was the flock in woolly fold."

—therein pointing to the fact that the Barn Owl remains in England throughout the winter,

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—therein pointing to the fact that the Barn Owl remains in England throughout the winter,

and likewise drawing attention to the especial closeness of its plumage. The face of this owl has the appearance of a mask, which is well delineated in the plate.

The plumage is very pretty. The ground colour is a pure white, shaded upon the upper part with tawny brown, some of the feathers being tinged with grey and tipped with black, forming a delicate pencilling. The breast is white, shaded with buff upon the chest. Very great variety, however, is shown in this colouring, many specimens having been obtained in which the brown so much predominated as to lead to the idea that it was a separate species. The female may be distinguished from her mate by a few black spots that appear on either side of the breast, as may be noticed in the initial engraving.

As with some other birds, age has a marked influence upon the plumage of the Owl, as in process of time the wings and tail become very much lighter; and in the case of several birds that were kept in confinement, they gradually became almost white.

Although it is possible that other kinds may frequent farmyards for the sake of food, yet this is the only Owl that inhabits buildings. The favourite haunt of the bird, as its name denotes, is in barns and such-like farm-buildings, but they will also be found inhabiting church-towers and the eaves of houses. Old ruins, too, are often chosen as a place of abode; and when once a pair of Owls have made their home, they continue to frequent the same spot for many years. Instances have occurred where a pair of Owls have taken possession of a pigeon-cote, much to the dismay and disgust of the pigeons, whose consequent departure from their home led to the discovery of the invaders.

The eggs are from three to five in number, of a dull-white colour, and nearly round.

The young differ greatly in size, which would lead to the supposition that the hen sits upon her eggs as soon as they are laid, and therefore some of the young are hatched from the eggs earlier than others. Being at this time covered with a white down, they present a very interesting and pretty appearance. This down adheres to them until they are perfectly fledged.

The food of the Barn Owl consists chiefly of mice, though young rats are often taken, and even small birds are laid under contribution. The number of mice captured by a pair of Owls is almost incredible, but when they have a nest of young these numbers are necessarily greatly increased; consequently, the Owl is of great use to the farmer in keeping down the numbers of that prolific little quadruped. The flight of the Owl is dull and heavy, but particularly noiseless. They feed at night, for then the mice quit their holes; and Owls may then be seen beating around the hedgerows of meadows or small enclosures in quest of prey. White of Selborne timed a pair, and found that they returned to their nest with prey of some kind about every five minutes. He proceeds to say: "But a piece of address which they show, when they return loaded, should not, I think, be passed over in silence. As they take their prey with their claws, so they carry it in their claws to their nest; but, as the feet are necessary in their ascent under the tiles, they constantly perch first on the roof of the chancel, and shift the mouse from their claws to their bill, that their feet may be at liberty to take hold of the plate on the wall as they are rising under the eaves."

The food is eaten—bones, feathers, and fur included—and digested throughout the day. The peculiar formation of the digestive organs, however, causes the bones, feathers, and fur to be retained; and these are thrown up, in the form of a pellet, during the day. These pellets may be found near their home, and the appearance of them may be generally held to denote the near presence of a pair of Owls.

These birds are non-gregarious, seldom more than a pair being found in the same building, unless it be some large ruin or old tower.

In addition to the screech before alluded to, this Owl will hiss and snore, which may have enhanced the reason of the superstitions with regard to these birds.

Barn Owls are often kept in confinement, or with clipped wings, and (except for the nature of their food) make interesting pets. They will, however, at times, necessarily require either fur or feather, so that the digestive organs may be assisted in throwing up the pellet.

CROSSBILL
(3/5 NATURAL SIZE)

[illegible]ROSSBILL.

[illegible]

[illegible] the same [illegible], the great [illegible] of this bird is the [illegible] of its beak. [illegible] it would appear [illegible] and [illegible], [illegible] [illegible] the [illegible] [illegible]

[illegible] of the [illegible] special [illegible] the [illegible] re- [illegible], the [illegible] own, [illegible] whole [illegible] [illegible] parts; [illegible] a [illegible] by [illegible] The [illegible] is

THE CROSSBILL.

Loxia curvirostra.

AS its name denotes, the great specialty of this bird is the peculiar formation of its beak. At first sight it would appear to be unnatural and useless, but is in reality exactly fitted to the purpose of obtaining the food that Nature has assigned to the bird.

But the formation of the beak is not the only special feature of the Crossbill, as the changes of plumage are remarkable. When young, the male birds are greenish-brown, with a tinge of olive, the whole being speckled with darker brown; they are, however, lighter upon the under parts; but after the first moult a red tinge prevails, occasioned by the tipping of the feathers with that hue. The red is

much darker upon the upper parts. At the second moulting these colours are lost, and the bird's plumage becomes an olive-brown, shaded over with greenish-yellow upon the back, though it is much lighter upon the under parts, and is speckled with orange upon the breast and rump.

The females are, however, either grey, with a little green on the head, breast, and rump, or else speckled in an irregular manner with those colours.

Bechstein says (and he is a great authority) :—" If the Crossbills are grey or speckled, they are young; if red, they are one year old, and have just moulted; if carmine, they are just about to moult for the second time; if spotted with red and yellow, they are two years old and in full feather. All these differences may be noted except at the time of laying; for as they do not make their nest at any fixed season, so neither is their moulting regular, from which arises the great variety in their appearance."

Therefore, the Crossbill very much resembles the Linnet in its assumption of the red plumage; and if kept in confinement, the same difference in moulting occurs. Young Crossbills bred in aviaries never acquire the red colour, but remain grey during the second year, or else moult to the greenish-yellow of the more adult bird.

The general form of the Crossbill is somewhat similar to that of the Greenfinch, but they vary in size almost as much as in colour.

The beak is used in climbing somewhat after the manner of Parrots.

Bechstein thus describes their nesting operations, which take place in Northern Europe, Asia, and America :—" Its incubation is the most remarkable of its peculiarities, for it breeds between December and April. It builds its nest in

the upper branches of coniferous trees, of thin pine or fir twigs, on which is placed a thick layer of earth moss, lined within with the finest coral moss. The female lays three to five greyish-white eggs, having at the thick end a circle of reddish-brown stripes and spots. Like all Grosbeaks, they feed their young with food disgorged from their own crops."

Their food consists chiefly of fir seeds, which the peculiar formation of the beak assists the bird greatly in extracting from the fir-cones; they will, however, feed upon the ground, as well as upon the branches of the trees. They also feed upon the seeds of the pine and alder, and the buds and flowers of the sumach. They are very fond, too, of the seeds of crab-apples, in extracting which their beaks, forming saws, are put to very great use.

Their general abode is necessarily amidst the forests of firs and pines that clothe the hills and mountains, but that only when the cones are abundant.

About October (but they are just as erratic in their migration as in other respects) they begin to arrive in England from the Continent; their numbers vary greatly, sometimes many birds arriving, and again, even in the succeeding year, but few of them grace this island with their presence. Their return to the Continent is quite as uncertain, as small parties depart at different periods.

The song of the Crossbill is harsh, and has but little melody; but the call whilst flying from tree to tree may be represented by "soc-soc-soc." Its general call is, however, "chip-chip-chip."

Their flight is close and rapid, and they generally fly together—sometimes in small parties, but at others in larger numbers.

This bird is not very generally known in England, on account of its short stay with us; and except for the peculiar formation of its beak, the many varieties of its plumage might be a source of indecision in the minds of many amateur ornithologists.

The Crossbills, somewhat like Parrots, are easily tameable, and may be kept either in a cage or aviary; their beaks, however, are very strong, and the cage should, therefore, be principally of tin and wire, as mere mahogany is very easily torn to pieces by the birds. A spirit of mischief, too, seems to induce them to demolish their cage if it happens to be of wood. They are, however, somewhat hardy, and will climb about their cage with the aid of their beak, in a manner to warrant their being called the "European Parrot."

EGGS AND EGG-COLLECTING.

By [illegible].

EGG-COLLECTING in these days of enlightenment is often [illegible], and it undoubtedly is so practised by some thoughtless people, who rob the eggs out of a nest without the slightest knowledge of [illegible]. But a very good collection may be made without doing any harm to the feathered fraternity. For instance, taking one egg out of a nest when the bird is sitting does not in the least interfere with the bringing forth her brood. There is an old su-

perstition that no bird can count to more than three. Whether this be true or not, a bird with four eggs very often forsakes her nest after two have been taken away, while this very rarely occurs if three remain.

The best way to go about making a collection is to commence in the early spring, looking for signs of birds *building* their nests; the Water Ouzel, or Dipper, breeds early, also the Common and Mistletoe Thrush. The eggs should be taken as soon as four appear in the nest, and blown in the following manner, taking it for granted that the collector is provided with a drill and blow-pipe. Drill a small hole exactly on the side of the egg, selecting that side of a spotted egg with the least colour. Then, with the point of the blow-pipe inserted in the hole, blow all the contents of the egg out, beginning to blow very gently at first, and being careful, with small eggs, not to burst them. When the contents are nearly emptied, wash the egg out with clean cold water, being careful not to wet the outside or rub it too much, or the colour will come out, as the spots of most eggs disappear if washed, or even if left long out in the rain. When the eggs have been blown and properly dried, the hole should be covered up with a piece of gummed paper, and the egg placed in a drawer with small compartments in it, amongst cotton-wool. A label should be placed with each egg, bearing the name and district in which it was found, day of the month, year, &c. These little memoranda often prove very useful afterwards.

The next point to notice is, that the usual positions of birds' nests have exceptions at times. For instance, the Water Ouzel, whose nest is usually near to some waterfall or moist place (very often *behind* a waterfall, through which she flies when disturbed), has been found nesting in

a tree twelve or thirteen feet from the water, and twenty feet from the bank. This nest was of ordinary shape and size, its material being of the same kind as others, and resting on a forked branch. When the bird was disturbed, she dived down into the water to make her escape; and in spite of wind, weather, and the awkward position she had selected, she reared her young in safety. Then, again, the Thrush, whose nest is generally found in hedges, amongst rocks and old stone walls, has been found building on the ground above a hundred yards away from any tree or shrub.

In the following descriptions we have again instructed the reader where to look for the nests, each in their usual localities; but if he cannot find the nests, and the birds are seen, he must not be discouraged, as he may be looking close to a nest and yet not be able to find it, the correspondence in appearance of the material with its surroundings being so close that it is very difficult even for a practised eye to distinguish them at times. Many nests are found through the alarm of the parent birds—some by their cry and others by their flight and gesture. The Golden Plover and Grouse feign lameness, and will make every effort to get the stranger or intruder to pursue them in their desire to decoy him from the whereabouts of their nests. Many people, when nest-hunting (as when shooting, &c.), keep their eyes fixed too much on one particular point of the horizon, instead of sweeping from one point to another, describing a kind of crescent with the eye. The country youth is generally an adept at finding birds' nests, his eyes being trained to the variation of colour and scene. The gamekeeper's son is very often the individual to get hold of for a collection, as he very frequently makes it a

special study to find birds' nests, and blow the eggs neatly in the spring; and of course his father preserves him the eggs of Hawks, Magpies, and other birds injurious to his game.

Of course the question will arise, how to get hold of birds' eggs that are not to be found within hundreds of miles of the collector's residence. The best way to get these is to exchange eggs with people of other districts, through the medium of advertisement or a friend. Another valuable assistant may sometimes be found in an angling friend, who generally meets with a great number and variety of birds' nests in his travels—in fact, with nearly all the British birds, with some rare exceptions.

Some collectors go in for preserving the nests as well as the eggs; but this is not of much use, unless taken when new, as the young birds in many cases partially destroy the nest. Moreover, this practice is a great deprivation to the birds, and the great bulk of such collections is out of all proportion to its real use or interest; in many cases it is almost impracticable, in fact, on account of the position and size of the nest. If any of our readers should wish to preserve these monuments of "instinctive genius," it is well to pour a few drops of spirits of turpentine into the material of which the nest is constructed, and then bake it carefully in an oven, in order to kill all insects, which are abundant in many nests. Dome-shaped nests, such as those of the Wren family, or Dippers' nests, ought to have wires put inside, to preserve their shape.

Some of our sweetest song-birds endure the vilest persecution only because they eat the black currants. In many country houses may be seen whole strings of Blackbirds', Thrushes', and Ring Ouzels' eggs, the two latter

EGGS.

1. Goldfinch. 2. Magpie. 3. Bullfinch. 4. Starling. 5. Chaffinch. 6. Raven. 7. Linnet. 8. Rook. 9. Wren.

EGGS.

1. Goldfinch. 2. Magpie. 3. Bullfinch. 4. Starling. 5. Greenfinch. 6. Robin.
7. Linnet. 8. Rook. 9. Wren.

having to suffer for the misdeeds of the former, owing to ignorance on the part of the people. A gentleman, whilst travelling in the north of Yorkshire, says he called at a small country cottage covered by ivy of immense growth, and surrounded by some very nice little gardens, in which were innumerable black currant trees. He found its sole occupants to be three old maids, who managed to get a living out of their gardens and a small farm. He was struck by the number of birds' eggs they had got, all threaded on to strings, and hung up against the old thick walls of the windows, like the trophies of a Red Indian in his wigwam. Upon making inquiry into their history, one of them pointed to a rusty old piece hung upon the cross-beam of the ceiling, saying, "When our poor brother was alive he used to clear our pests away with that; but now he is gone we try to keep the stock down by taking their eggs, which we keep a sharp look-out for in the spring, when we are attending to our farm and gathering firewood in the surrounding neighbourhood." Such was the wanton destruction of the feathery tribe through ignorantly confounding all with the one guilty culprit—the Blackbird.

We therefore draw these general remarks to a close with a repetition of the hope, that none of our readers will take more eggs than is absolutely necessary for the purposes of a collection.

THE GOLDFINCH.

THIS bird seems actually to prefer cultivated districts, as it builds its nest in gardens and orchards, and has been even known to build in rose-bushes and other trees trained against

a dwelling-house. The nest is composed of moss, a little hay and wool, lined with seed-down of the willow and hair neatly woven together. The eggs are four or five in number; white, tinged with blue, and spotted at the larger end with raw sienna.

THE MAGPIE.

THE Magpie builds her nest on the tops of very tall trees, but it has sometimes been found in comparatively small bushes. It is large, domed, and almost spherical in shape, composed of brambles, thorny sticks, clay, and finer sticks, and lined inside with dead grass and fibrous roots; it has a hole on each side. She lays six or seven eggs of a dirty light blue, spotted with yellowish-brown all over.

THE BULLFINCH.

THIS bird lays four or five eggs of a pale blue colour, spotted and streaked with raw sienna, brown, or purple. The nest is made of twigs and fibrous roots, and lined with horsehair; it is situated in thick garden and other hedges. The female sits very close, so that she may even be touched without leaving the nest.

THE STARLING.

THE Starling makes her nest of hay, straw, and fibrous roots; her favourite haunts are the gable-ends of old houses, cliffs, and hollow trees. She lays four or five eggs of a beautiful light blue, tinged with green. If she is left undisturbed, she will use the same nest for several years, with a little repairing each spring. She is very affectionate to

her young, and works in hearty co-operation with her mate to procure them food, which is an enormous quantity in the course of a day.

THE CHAFFINCH.

THE Chaffinch generally builds her nest in the forks of trees covered with lichens; it is made of moss, wool, and lichen, the inside being lined with hair and feathers. She makes a beautiful nest, small but deep, and it harmonizes so much with its situation that it is very difficult to find. She lays four or five eggs of a grayish-blue, spotted and streaked with a dirty purple-red. She sits very close, in fact we once knew a bird remain on her nest till a mischievous boy caught her by the tail, pulling it out as she rose to fly; and she returned and reared her young after that.

THE RAVEN.

THE Raven lays five or six eggs of a gray-green ground colour, spotted and blotched with a darker greenish or smoky brown. She builds her nest in high, inaccessible rocks and cliffs, either on the sea-shore or inland, and it is sometimes found on the tops of lofty trees. It is composed of sticks of various sizes and kinds, wool, and hair.

THE LINNET.

THIS little bird lays from four to six eggs of a whitish faint blue tinge, speckled with purple-red, and her nest is composed of moss, bent fibrous roots, and wool, lined inside with hair and feathers. She builds in whitethorn, blackthorn, and furze bushes; very rarely in trees.

THE ROOK.

The Rook lays four or five eggs of a pale green colour, spotted and blotched with greenish or smoky brown. She makes her nest of sticks, straw, hay, &c., and is rather particular about it, pulling it to pieces and rebuilding it several times. Tall trees are usually selected, generally near to some mansion or village, where the rooks form a small colony. This bird lays very early, and has been known to commence sitting even in November.

THE COMMON WREN.

This little bird lays six eggs of a yellowish-white tinge, spotted at the larger end with a kind of brownish-red. It builds several supplementary nests, which are simply made of moss and lichen; this is attributed to the male bird by some naturalists; but however this may be, as a rule two of these nests will be bound to one of the others lined with feathers, which is intended for incubation. The nest is built in old barns, on the sides of cliffs, and in the roots of trees; it is dome-shaped, and has a very small entrance.

THE JAY.

The Jay lays five or six eggs of a pale greenish-blue, sometimes yellowish-white, thickly spotted with minute brown spots, generally confluent on the larger end, where there are several irregular black lines. She builds her nest in the thickest parts of woods, where it may be well out of sight. It is composed of sticks, small twigs, small fibrous roots, and grass.

EGGS.

1. Golden-crested Wren. 2. Whitethroat. 3. Siskin. 4. Thrush. 5. Greenfinch. 6. Redstart. 7. Great Tit. 8. Teal. 9. Blackbird.

[illegible]

[illegible]

[illegible] by [illegible] build [illegible] [illegible] Their n[illegible] [illegible] and lin[illegible] [illegible] very [illegible] the whereabo[illegible]

[illegible]

The Kestrel lays four [illegible] with a [illegible]

EGGS.

1. [illegible] Wren. 2. Whitethroat. 3. Siskin. 4. Thrush. 5. Greenfinch.
6. [illegible]. 7. Great Tit. 8. Teal. 9. Blackbird.

THE HOUSE SPARROW.

THIS familiar little bird builds her nest in the walls of old stone houses, at the back of spouting, and amongst ivy. It is particularly fond of ejecting the Martin from her carefully-built home, and has been even known to turn out the eggs of this little harmless bird. She lays five or six eggs, of a dirty white, covered with black or dark brown spots.

THE JACKDAW.

THE Jackdaw builds her nest in towers of churches, the ruins of old castles and abbeys, rocks, hollow trees, and chalk pits. It is made of sticks, straw, and hay, with an inner lining of large feathers and wool. The eggs are a pale green-blue, spotted with dingy brown; the spots are confluent at the larger or thicker end.

THE COMMON GROUSE.

THE Grouse lays on an average about nine eggs; as many as fifteen have been found, but this number has been by some attributed to two birds, as they will sometimes build (if we may term it such) within a yard of each other. Their nests merely consist of a little hollow scratched out, and lined with heather or bent. The eggs are of a dirty white colour, covered with umber-brown spots. Both the old birds are very cunning in trying to decoy the intruder away from the whereabouts of the nest, feigning lameness or injury.

THE KESTREL.

THE Kestrel lays four or five eggs of a dirty white, sometimes with a bluish tinge, thickly covered with reddish-

brown blotches. She makes a loose, slovenly nest of sticks hay, and wool, sometimes using scarcely any. Her nest i generally situated on high mountain or sea cliffs, or th tops of fir-trees; she has been known to occupy th deserted nest of the crow.

THE ROBIN.

THIS beautiful little bird, the favourite of English children builds her nest in walls and banks, where roots and mos abound. It is composed of moss, fibrous roots, and leaves and is sometimes lined with hair. She lays five or six egg of a very light gray, spotted with a dull light red; some times these spots are very few.

THE REDPOLL.

THE eggs of this bird are four or five in number, of a ver pale blue-green colour, spotted about the larger end wit orange-red. The eggs retain much of their pretty colou after being blown, they are of such a beautiful blue. Sh makes her nest of hay and moss, lined inside with willow down, and this is done as instinct only can do it, an finished off in the most beautiful manner. She builds he nest in willows, alders, and other bushes that fring streams and ponds in mountainous districts.

THE RINGDOVE.

THE Ringdove makes a very loose, slovenly nest of twig and sticks, and it is sometimes so badly built that the egg may be seen through the bottom of the nest. She build in fir, yew, or other trees, sometimes in ivy that grow upon rocks and trees, very near the ground. She lays tw white eggs of a rounded oval shape.

THE WRYNECK.

THE eggs of this bird are from five to eight in number, of a pure white. She makes her nest in holes in the trunks of trees. It is made of dry, rotten wood, which is ground down to a kind of powder, and it has been found lined with moss and feathers.

THE GOLDEN-CRESTED WREN.

THIS little bird, like the others of its tribe, lays a considerable number of eggs for its small size. They are eight or nine in number, thickly spotted with reddish-brown, these spots being confluent at the larger end. The underground colour is a faint fleshy tint. Her nest is made of moss and lichens, and is lined with willow-down and feathers. The outside of the nest generally harmonises with its situation, which is amongst the branches of a tree, generally of the fir, from a branch of which the nest is usually suspended.

THE WHITETHROAT.

THE Whitethroat lays four or five eggs of a greenish-white colour, spotted with brown and gray, the spots forming a zone or belt round the larger end, and much thicker. Her nest is made of dead grass and a little hair, loosely attached, the nest being carelessly made. It is situated in low thick herbage, or amongst nettles, or other ground weeds.

THE SISKIN.

THIS bird lays four or five eggs of a bluish ground colour, some being spotted all over with cloudy rusty spots, others with these spots well defined about the larger end. Her

nest is made of green moss, small twigs, dried grass, a sometimes lined with feathers and rabbits'-down. T nest is rarely found in Britain; its usual situation amongst furze-bushes.

THE THRUSH.

THE Thrush builds her nest in hedges, banks, against t trunks of trees, in stone walls, and is fond of ivy agai trees or rocks. Her nest is made of grass and moss, t interior being lined with clay or cow-dung, in which sometimes found pieces of decayed wood. She lays fr four to six eggs, of a beautiful blue spotted with bla most of the spots being on the thick end of the egg.

THE GREENFINCH.

THIS bird lays four or five eggs, which are white ting with blue, and speckled at the larger end with light oran brown. Her nest is situated in thick hedges, ivy, hol and other evergreens. It is composed of moss and wo and is lined with hair and feathers. The nests of th birds have been found so close that the material of t was interwoven together.

THE REDSTART.

THE nest of this bird is made of moss lined with hair a feathers. It is situated in holes in rocks, walls, tre stables, and barns; and the bird has been known to bu in a plant pot with the bottom upwards, entering throu the hole. She lays from five to seven eggs, of a p bluish-green, unspotted.

EGGS.

1. Nuthatch. 2. Sea Gull. 3. Woodpecker. 4. Kingfisher. 5. Moorhen.
6. Nightingale. 7. Lapwing. 8. Barn Owl. 9. Crossbill.

EGGS.

1. [illegible] 2. [illegible] 3. Woodpecker. 4. Kingfisher. 5. Moorhen.
6. [illegible] 7. [illegible] 8. Barn Owl. 9. Cuckoo.

THE BLACKBIRD.

THE Blackbird builds her nest in stone walls, holly bushes, hedges, and amongst ivy. It is made with small twigs, roots, and cow-dung or clay intermixed, and lined inside with very fine slender grass. She has been known to try to build on the side of a cliff, where the sticks, &c., would not remain, but have fallen down until there was enough to make half-a-dozen nests, yet the bird continued to bring fresh material. She lays four, five, and rarely six eggs of a dull bluish-green, spotted all over with brown blotches.

THE GREAT TIT.

THE eggs of this bird are from six to twelve in number; their colour is white, spotted with a reddish-brown. The nest is composed of moss, feathers, and hair, and is situated in holes in walls and trees. The bird has been known to make these holes herself in the trunk of a tree, working with great diligence and rapidity until she had finished.

THE TEAL.

THE Teal builds its nest where rushes are abundant, chiefly on marshes in Scotland and the north of England. The nest is composed of large quantities of dried sedges, flags, and other water plants, and is lined with feathers. The bird lays eight or ten eggs, which are white, without the faintest tinge of blue.

THE NUTHATCH.

THIS bird lays from five to seven eggs in number, of a pure white spotted with red-brown. They are very often mistaken for the eggs of the Great Titmouse. The nest

is made of the dried leaves of the oak, apple, elm, &c., carelessly arranged. It is situated in a hole of a decaying tree, and if too large at the entrance the bird plasters it up until she can just get in and out comfortably.

THE COMMON SEA-GULL.

THIS bird lays two, and sometimes three eggs, of a pale green or a yellowish-white colour, irregularly blotched with gray and blackish-brown. Her nest is made of sea-weed, dry grass, &c., and is found on sea cliffs and bold rocky headlands, such as St. Abb's Head in Berwickshire.

THE GREEN WOODPECKER.

THE eggs of this bird are three or four in number, of a very light bluish-tinged white colour. Her nest is made entirely of the pieces of wood chipped off by the bird in her boring operations. It is placed in the trunk of a tree, frequently in a hole which the bird herself has previously excavated, and perhaps used before. She seems to have a particular liking for the aspen and black poplar tree.

THE KINGFISHER.

THIS bird lays six or seven eggs, nearly round, white and shining. When fresh and unblown, the yolk shows through the shell, and gives it a beautiful pink colour, something similar to the Dipper's, but more clear and vivid. The nest is composed of the bones of fishes, and is generally in the Sandmartin's previous excavations, about three or four feet above the usual surface of the water.

THE MOOR-HEN.

THE eggs of this familiar and semi-domestic bird are from eight to ten in number, of a pale brownish-grey, spotted with umber-brown. This bird, like the duck, when leaving the nest covers her eggs with flags and reeds, of which also the nest is made. She builds among the sedges on the banks of streams and ponds, and sometimes in trees. Nests have often been found in willow-branches which touch and float upon the water.

THE NIGHTINGALE.

THE eggs of this bird are from four to six in number, and are usually of a yellowish olive-brown colour, unspotted, but are occasionally found blue. Her nest is made of dried leaves, lined inside with fine grass. It is situated on the ground in woods and shrubberies, especially on the little banks at the foot of trees, under the shelter of ferns or weeds.

THE LAPWING.

THE Lapwing, or Green Plover, makes a very simple nest, only scratching a hole and lining it with bent or short grass. She generally makes it on a little knoll, so that it may be out of danger of being deluged, as her home is generally in swampy marshy land. She lays four eggs of a dirty-green ground, blotched all over with dark brown spots, and the colour harmonises so well with the ground, that it is sometimes very difficult for the collector to see them even when looking close to where they are.

THE BARN OWL.

THE Barn Owl lays two eggs at a time, that is, lays two and hatches them, and lays again, even to a second and

third time, before the first have flown. They are white and unspotted. She makes a very slight nest of sticks, hay, and sometimes of her own cast-off feathers. She selects barns, old ruins, hollow trees, and crevices of rocks, overshadowed by ivy or creeping plants.

THE CROSS-BILL.

THIS bird lays four or five eggs of a white colour, tinged with pale blue, resembling the colour of skim-milk, and speckled with red, but only very sparingly. Her nest is made of twigs, grass, and sometimes lined with a few long hairs. She builds mostly among the branches of the Scotch fir, the nest being generally close to the boll or stem.

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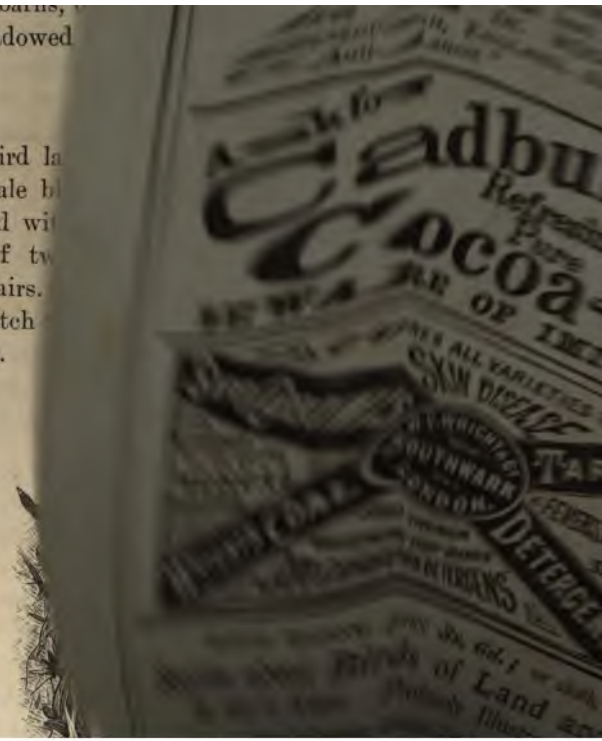

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